



# SCHOOL OF ENGINEERING

## SOE-BULLETIN

The Official Newsletter of **School of Engineering**



# SCHOOL OF ENGINEERING

## Vision

Transform lives through excellence in engineering education, research and innovation with an emphasis on sustainability, inclusive technologies and global needs.

## Mission

1. Design and deliver contemporary engineering curricula to address regional and global needs while emphasizing ethics, values, integrity and regional relevance.
2. Carry out high impact academic research, industry projects and innovation activities with active student engagement to advance science and engineering knowledge and state-of-the-art industry practices.
3. Develop regional and national leaders to advance the society and economy.

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# SCHOOL OF ENGINEERING



## INTERNATIONAL ACTIVITIES

## “Value Added Course on Diffractive Micro-Optics”

The Department of Electronics and Communication organized a Value-Added Course on Diffractive Micro-Optics for V Semester students from 5th to 15th November 2024. The resource person for the event was Dr. Pavelyev, Vladimir S, Head, Department of Nanoengineering, Chief Researcher, Samara National University, Russia. This value-added course focussed on theoretical foundations, practical applications, CAD-based designs, and emerging trends in the domain of micro-optics and nanophotonics. The event started with a welcome note delivered by Cindrella.S and Karthick G Raj and the Chairman of the Department of ECE, Dr. Arun Balodi welcomed the guest speaker to the event. This value-added course, conducted by Dr. Vladimir S. Pavelyev, introduced students to the theoretical foundations and practical applications of diffractive micro-optics. With sessions tailored for V Semester students, the program emphasized design approaches, optimization techniques, and emerging technologies. It concluded with a comprehensive discussion of the trends in nanophotonics and their future potential.

The poster features logos for Dayananda Sagar University, IEEE DSU Student Branch, IEEE Signal Processing Society Bangalore Chapter, and the School of Engineering. It includes a QR code for registration, a photo of the expert Dr. Pavelyev, and lists of Chief Patrons, Patrons, and Conveners. The event is scheduled for 5th-15th November 2024 at Lecture Theatre 2.

**DAYANANDA SAGAR UNIVERSITY**  
DEVARAKAGGALAHALLI, HAROHALLI, KANAKAPURA RD, DIST.RAMANAGARA, KARNATAKA- 562112

**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**  
*Organizing*

**VALUE ADDED COURSE  
ON  
“DIFFRACTIVE MICROOPTICS”**

To register, scan the QR

**EXPERT**

**Dr. Pavelyev, Vladimir S.**  
**Department of Nanoengineering**  
**Head, Chief researcher**  
**Samara National university, Russia**

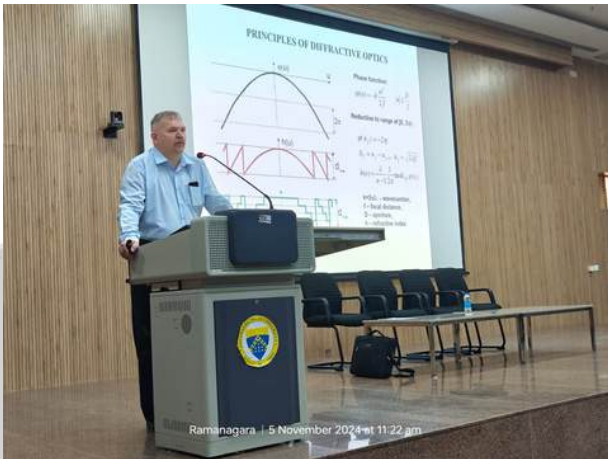
**5th - 15th November 2024**  
**Lecture Theatre 2**

**Chief Patrons:**  
Dr. D. HEMACHANDRA SAGAR, CHANCELLOR, DSU  
Dr. D. PREMACHANDRA SAGAR, PRO CHANCELLOR, DSU

**Patrons:**  
Dr. AMIT BHATT, VICE CHANCELLOR, DSU  
Dr. PUTTAMADAPPA C, REGISTRAR, DSU  
Dr. UDAYA KUMAR REDDY KR, DEAN-SOE, DSU

**Conveners:**  
Dr. ARUN BALODI, CHAIRMAN-ECE, DSU

**FACULTY CO-ORDINATORS:**  
DR. VINU R  
DR. DEEPTHI CHAMKUR V





# SCHOOL OF ENGINEERING



**WORKSHOPS / SKILL DEVELOPMENT PROGRAMS**

## Workshop on “Parallel and Pipeline Implementation of FIR and IIR Filter on FPGA Using MATLAB/Simulink”

The Department of Electronics and Communication Engineering (ECE) conducted a workshop on Parallel and Pipeline Implementation of FIR and IIR Filters on FPGA using MATLAB/Simulink on November 7th and 8th, 2024, for 5th-semester ECE students. Dr. Arun Balodi, Professor and Chairman, inaugurated the workshop with an emphasis on the importance of digital filter design in signal processing. Led by Dr. Shirshendu Roy, Assistant Professor, the technical sessions covered FIR and IIR filter fundamentals, different filter structures, parallel processing, and pipelining techniques, as well as data formats and FPGA implementation basics. Prof. Nadeem Pasha and Prof. Jaishree Ramadevaru coordinated the event, guiding students through hands-on sessions involving FIR filter design in Simulink, conversion to Verilog code, and verification in Vivado. The workshop offered valuable practical insights, enabling students to bridge academic concepts with industry-standard tools. Dr. Balodi concluded the event by thanking all participants and faculty for their contributions, reinforcing the department's commitment to experiential learning.

The poster features logos for Dayananda Sagar University, IEEE DSU Student Branch, IEEE Signal Processing Society, and the School of Engineering. The central text reads: 'DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING presents WORKSHOP ON PARALLEL AND PIPELINE IMPLEMENTATION OF FIR AND IIR FILTER ON FPGA USING MATLAB/SIMULINK'. It specifies dates (November 7, 2024--B Section; November 8, 2024--A Section), location (A-309), and time (1.50 p.m-4.30 p.m). It lists Chief Patrons (Dr. D. Hemachandra Sagar, Chancellor; Dr. D. Premachandra Sagar, Pro Chancellor), Patrons (Dr. Amit Bhatt, Vice Chancellor; Dr. Puttamadappa C, Registrar; Dr. Udaya Kumar Reddy Kr, Dean-SoE), Co-ordinators (Prof. Nadeem Pasha; Prof. Jaishree Ramadevaru), and Conveners (Dr. Arun Balodi, Chairman-ECE; Dr. Shirshendu Roy).

DAYANANDA SAGAR UNIVERSITY | IEEE DSU Student Branch | IEEE Signal Processing Society | SCHOOL OF ENGINEERING

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING  
*presents*  
**WORKSHOP**  
ON  
PARALLEL AND PIPELINE  
IMPLEMENTATION OF  
FIR AND IIR FILTER ON FPGA  
USING MATLAB/SIMULINK

November 7, 2024--B Section  
November 8, 2024--A Section

**A-309**

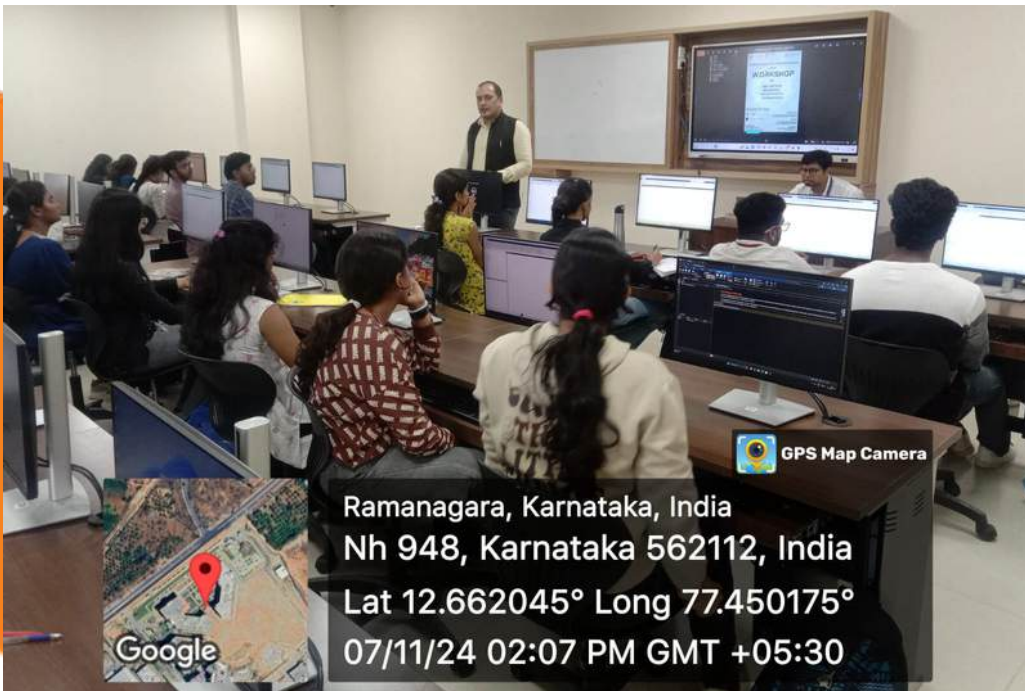
1.50 p.m-4.30 p.m

**Chief Patrons:**  
Dr. D. HEMACHANDRA SAGAR, CHANCELLOR  
Dr. D. PREMACHANDRA SAGAR, PRO CHANCELLOR

**Patrons:**  
Dr. AMIT BHATT, VICE CHANCELLOR  
Dr. PUTTAMADAPPA C, REGISTRAR  
Dr. UDAYA KUMAR REDDY KR, DEAN-SOE

**Co-ordinators**  
Prof. Nadeem Pasha  
Prof. Jaishree Ramadevaru

**Conveners:**  
Dr. ARUN BALODI, CHAIRMAN-ECE  
Dr. SHIRSHENDU ROY



## Workshop on “Robotics Certification Program”

The Department of Electronics and Communication Engineering at Dayananda Sagar University, in collaboration with Safear India, organized a Robotics Certification Program on 15th November 2024. The event witnessed an overwhelming participation of 140 students, eager to explore the world of robotics and automation. The trainers, John Srivastava, Debasis Doki, Abhishek Narayan, and Anjani Tiwari from Safear India, provided in-depth technical knowledge and guided students through the process of building and programming autonomous line-following robots. The practical sessions ensured that participants gained a comprehensive understanding of real-world robotics systems and their applications. The event was convened by Dr. Arun Balodi, Chairman, Department of Electronics and Communication Engineering and organized by Dr. Pushpa P.V. Professor, Department of Electronics and Communication Engineering, Prof. Puneeth S, Assistant Professor, Department of Electronics and Communication Engineering and Dr. Navya R, Assistant Professor, Department of Electronics and Communication Engineering and Pannati Jayashree A, serving as the student organizer. The workshop emphasized hands-on learning, fostering a deeper understanding of robotic systems and real-world applications. The Dean of the School of Engineering, Dr. Uday Kumar Reddy, extended his support, and the participants left the workshop with invaluable insights and certifications.



The poster for the Robotics Certification Program features a blue background with white and orange accents. At the top left is the Dayananda Sagar University logo and the text 'Department of Electronics and Communication Engineering'. At the top right is the 'SAFEAR INDIA' logo. The main title 'ROBOTICS CERTIFICATION PROGRAM' is in large, bold, white letters, with the subtitle 'One-Day certified-workshop with hands-on-robotics happening in your Campus' below it. A small image of a robot is on the right. A list of 8 topics is in the center, and a QR code is on the right. At the bottom, it says '15TH NOVEMBER 2024', 'SCAN TO REGISTER FOR THE PROGRAM', and lists the organizers, trainers, and student organizer.

www.safeardefense.com

### ROBOTICS CERTIFICATION PROGRAM

One-Day certified-workshop with hands-on-robotics happening in your Campus

- 1 Robot Controller Architecture and MicroPython Fundamentals
- 2 Interfacing with I2C, SPI, and UART Protocols
- 3 Sensor Integration and Data Analysis Techniques
- 4 Motor Control Systems and Basic Robotics Design
- 5 Introduction to PID Control for System Optimization
- 6 Sensor Fusion for Enhanced Robotics Control
- 7 Real-Time Communication & Robot Networking
- 8 Build Your Robots: Line Following and Obstacle Avoidance

**15TH NOVEMBER 2024**

**SCAN TO REGISTER FOR THE PROGRAM**

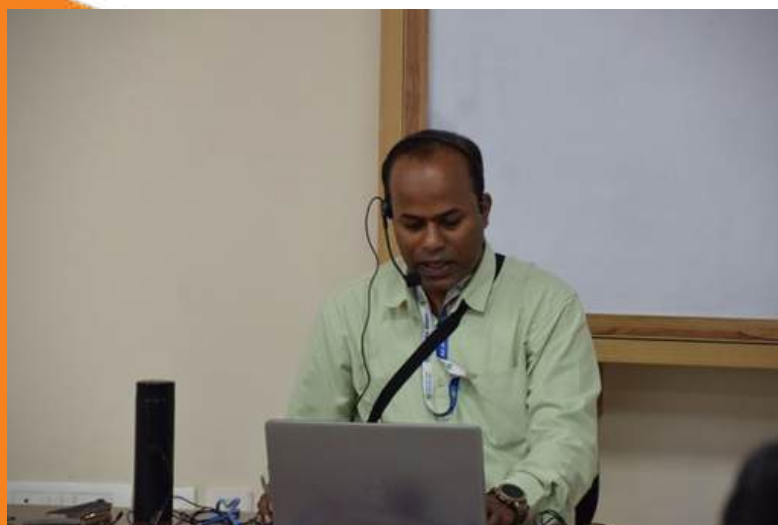
Dean-SOE  
Dr. Uday Kumar Reddy

Convener Dr. Arun Balodi	Organisers Dr. Pushpa PV Prof. Puneeth Dr. Navya	Trainers Safear Defense Pvt. Ltd.	Student Organiser Pannati Jayashree E.
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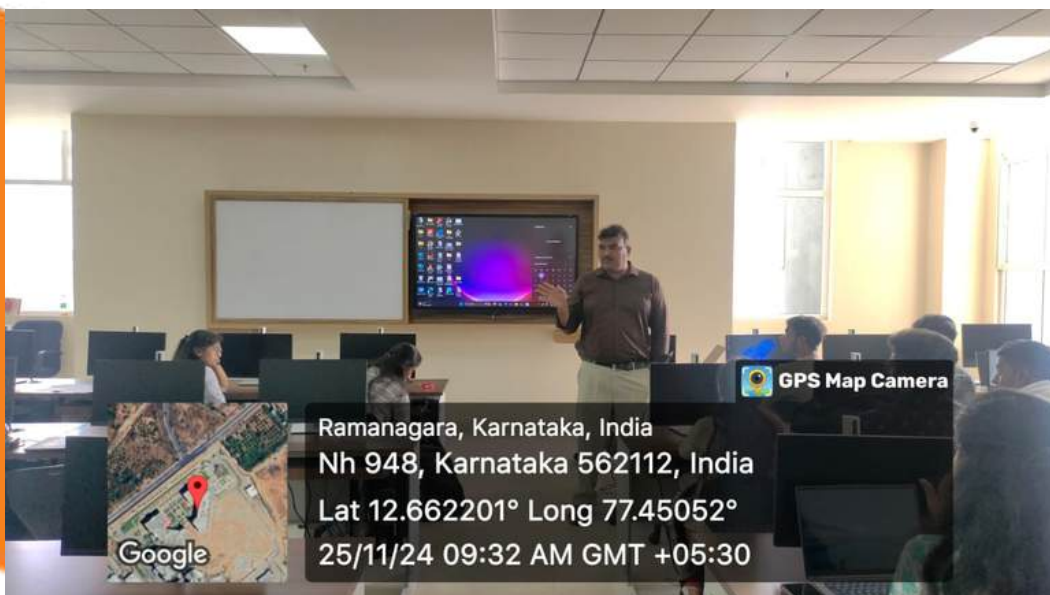
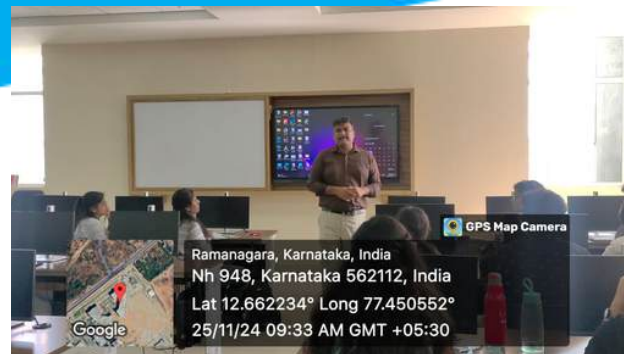
## Three-Day Hands-On Workshop on “MATLAB and Simulink”

The Department of Artificial Intelligence and Robotics (AIR) at Dayananda Sagar University (DSU) organized a three-day hands-on workshop on MATLAB and Simulink for its students. The workshop, conducted by Dr. Pramod Kumar Naik, Head of the AIR Department, focused on equipping students with practical knowledge and technical expertise in MATLAB and Simulink, two widely used tools for engineering simulations, modeling, and analysis. The workshop provided students with valuable skills and practical insights into MATLAB, and Simulink, and their applications in audio processing, spectrum analysis, and machine learning. Dr. Pramod Kumar Naik's expertise and interactive teaching methods were instrumental in the success of the workshop. The event reflects the AIR Department's commitment to empowering students with cutting-edge tools and knowledge, preparing them to excel in their academic and professional endeavors.



## 5-day Value Added Course Hands-On Training: “To Become a Microsoft Azure Data Engineer”

Under DataScience@DSU Club, the 5-day value-added course organized by Dr. Suresh Arumugam, Associate Professor, Department of CSE (Data Science), School of Engineering, Dayananda Sagar University, was held from 25th November 2024 to 29th November 2024 from 9:00 am to 4:00 pm for the 5th-semester students. The demand for cloud-based solutions has surged dramatically, driving the need for skilled professionals in cloud computing. Microsoft Azure, being one of the top cloud platforms, offers a range of certifications and hands-on training to help individuals become proficient in its tools and services. This course provided participants with expert insights and practical experience in leveraging Microsoft Azure for data engineering.



## Hands on Training on structures using “SIMULIA 3DEXPERIENCE”

The Department of Aerospace Engineering organized training on structures using SIMULIA 3DEXPERIENCE as part of the Introduction to Finite Element Analysis Course with EDS Technologies Bangalore. Mr Saifali taught the V semester students about various structural analyses utilizing the Simulia 3D experience program. Dr. Avinash and Prof. Sripad Kulkarni S handled this event, which was successfully finished on November 14, 2024, at the Product Design Lab, III floor of DSU's main campus.





# SCHOOL OF ENGINEERING



**WEBINARS / SEMINARS / TECHNICAL TALKS**

## Expert Talk on “Navigating the Future: Tips for Interviews, Higher Studies, and Entrepreneurship”

On November 9th, 2024, the Department of CSE (AI&ML) at Dayananda Sagar University organized an expert talk on "Navigating the Future: Tips for Interviews, Higher Studies, and Entrepreneurship" for the 7th Semester CSE (AI&ML) students. The session started by welcoming the resource Person Dr. Bahubali Shiragapur, professor in CSE (AI&ML). Dr. Bahubali shared an enriching session on higher education and career success strategies. Dr. Bahubali emphasized a structured approach to pursuing higher studies, advising students on identifying personal interests, exploring research-oriented programs, preparing for exams, seeking scholarships, and networking with alumni. He also highlighted the importance of internships and research to build practical experience and enhance professional networks. For career preparation, Dr. Bahubali shared strategies for excelling in interviews, including researching companies, practicing responses, showcasing problem-solving abilities, and demonstrating essential soft skills. He further inspired students to consider entrepreneurial paths, encouraging innovation and the pursuit of ventures beyond traditional roles. Dr. Bahubali's insightful guidance left a positive impact, equipping students with valuable tools for academic and career advancement.

The poster features the Dayananda Sagar University logo and name at the top left, along with the School of Engineering logo at the top right. The main title is prominently displayed in the center. A circular portrait of Dr. Bahubali Shiragapur is on the left. The event details, including date, time, and location, are listed on the right. The bottom section lists the names of the Chief Patrons, Patrons, and Conveners.

**DAYANANDA SAGAR UNIVERSITY**  
DEVARAKAGOAHKALLI, HAROHALLI, KANAKAPURA RD, DIST RAMANAGARA, KARNATAKA-562112

**SCHOOL OF ENGINEERING**

**DEPARTMENT OF ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING**  
ORGANISING

**NAVIGATING THE FUTURE: TIPS FOR INTERVIEWS, HIGHER STUDIES, AND ENTREPRENEURSHIP**

Join us for an insightful talk by Prof. Bahubali Shiragapur on "Navigating the Future" for 7th Sem AI-ML students, on 8th Nov, 10:00-11:00 AM. Gain valuable tips on interviews, higher education, and entrepreneurship!

**Dr BAHUBALI SHIRAGAPUR,**  
Professor  
CSE(AI-ML) Dept

**FACULTY COORDINATOR**  
DR VINUTHA N, ASSOCIATE PROFESSOR-AI/ML, DSU

**10:00 am to 11:00 am**  
**Lecture hall 1**  
**8th November 2024**

**CHIEF PATRONS**  
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DR.D.PREMACHANDRA SAGAR, PRO-CHANCELLOR, DSU

**PATRONS**  
DR.AMIT BHATT, VICE-CHANCELLOR, DSU  
DR.PUTTAMADAPPA C, REGISTRAR, DSU  
DR.UDAYA KUMAR REDDY K R, DEAN, SOE

**CONVENERS**  
DR. JAYAVRINDA VRINDAVANAM, CHAIRPERSON-AI, ML, DSU



## Tech Talk from Industry Experts: “TCS Robotics and Bosch Robotics”

On November 23, 2024, the Department of Artificial Intelligence and Robotics (AIR) at Dayananda Sagar University hosted a seminar-tech talk on "Future Opportunities in Robotics and AI," aimed to provide students with a vision of the evolving fields of robotics and artificial intelligence. The seminar featured prominent industry leaders from TCS and Bosch Industries, who shared their invaluable expertise on the emerging trends, challenges, and career prospects within the robotics and AI sectors. The event was meticulously organized by Dr. Pramod Kumar Naik, Head of the AIR Department, and Prof. K. Sudha Deepthi, Manager of the Rexroth Bosch Innovation Lab at DSU. Their efforts facilitated engaging discussions between the students and industry professionals. Both TCS and Bosch highlighted the importance of innovation, practical skills, and continuous learning to stay competitive in the global tech industry.

The poster is for a 'Tech-Talk Seminar on Trends and Opportunities in Robotics and AI' held at Dayananda Sagar University. It features the university's logo and name, along with the location: Devarakaggalahalli, Harohalli Kanakapura Road, Dt, Ramanagara, Karnataka 562112. The event is dated 23/11/24 from 10:45 AM to 4:00 PM in Room No. 231. The seminar is hosted by the Roboverse Club. The main title is 'TECH-TALK SEMINAR ON TRENDS AND OPPORTUNITIES IN ROBOTICS AND AI' with a subtitle '“EXPERTS FROM INDUSTRY: TCS ROBOTICS & BOSCH ROBOTICS”'. The poster includes photos of the Chief Convener, Dr. Pramod Kumar Naik, and the Chief Adviser, Dr. Rupam Bhaduri. It also lists the Student Coordinators: Mr. Umar Bin Muzzafar, Mr. Shubhanandan, Mr. K. Siddharth, and Mr. M. Gheta. The poster has a blue and white color scheme with a background image of a hand pointing at a futuristic interface with gears and a globe.

**INSTITUTION'S INNOVATION COUNCIL**  
Ministry of Education, India

**DAYANANDA SAGAR UNIVERSITY**  
Devarakaggalahalli, Harohalli Kanakapura Road, Dt,  
Ramanagara, Karnataka 562112.

23/11/24 - 10:45-4:00 PM  
Room No:- 231

**TECH-TALK**  
**SEMINAR ON TRENDS AND OPPORTUNITIES IN ROBOTICS AND AI**  
“EXPERTS FROM INDUSTRY: TCS ROBOTICS & BOSCH ROBOTICS”

**HOSTED BY ROBOVERSE CLUB**

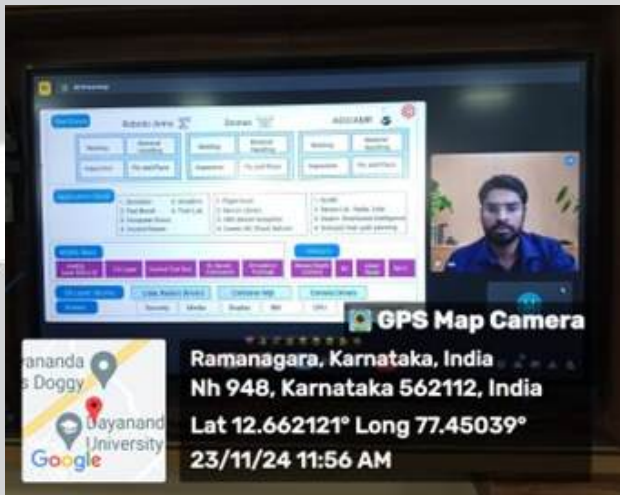
In Roboverse Club for an electrifying Tech-Talk, where we dive into the latest trends and exciting opportunities shaping the future of technology!

**Chief Convener**  
Dr. Pramod Kumar Naik  
Chairperson, AIR.

**Chief Adviser**  
Dr. Rupam Bhaduri  
Professor, AIR.

**Student Coordinators**

- Mr. Umar Bin Muzzafar
- Mr. Shubhanandan
- Mr. K. Siddharth
- Mr. M. Gheta



## Expert Talk on “Unlocking Tomorrow: Interviews Tips to Secure your Dream Job”

On November 13th, 2024, the Department of CSE (AI&ML) at Dayananda Sagar University organized an expert talk on "Unlocking Tomorrow: Interviews Tips to Secure your Dream Job" for the 5th Semester CSE (AI&ML) students. Dr. Vinutha N, Associate Professor, CSE (AI & ML) department welcomed alumni Mr. Rohan R and Mr. M Adarsh Pryan, Product Engineers at Infosys Finacle, to deliver a session on the interview process and career preparation. They discussed aptitude, problem-solving skills, coding rounds, interview strategies, and post-interview training. Key insights included practicing on platforms like Hacker Rank and Code Chef and presenting approaches clearly during coding assessments. Technical rounds focus on data structures, DBMS, and problem-solving, with common questions on linked lists, SQL queries, and Unix commands. Students were advised to understand their projects thoroughly and expect project-related queries. Post-interview, candidates undergo six months of training in foundational topics like C programming, backend development, and dynamic programming, supplemented by Udemy courses and regular assessments. Emphasis was placed on choosing a specific career path like AI or Data Science and building practical skills over certifications. Real-world projects and hands-on experience are prioritized for placements.

**DAYANANDA SAGAR UNIVERSITY**  
DEPARTMENT OF CSE (ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING)

**"UNLOCKING TOMORROW:  
INTERVIEW TIPS TO SECURE YOUR  
DREAM JOB"**

Join us for an insightful talk by distinguished alumni Rohan R and M Adarsh

**ROHAN R**  
Product Engineer  
Infosys Finacle

**M Adarsh Pryan**  
Product Engineer  
Infosys Finacle

**CHIEF PATRONS**  
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DR.D.PRITHVICHANDRA SAGAR, PRO-CHANCELLOR, DSU

**PATRONS**  
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DR. PUTTAPADAPPA C. REGISTRAR, DSU  
DR. UDAYA KUMAR REDDY K.A. DEAN CSE  
DR. C. HARVEY BABU, ASSOCIATE DEAN CSE

**COORDINATORS**  
Vijay Kumar S  
Director - Training & Corporate Relations  
Roopa Priya J K  
Placement Officer

**FACULTY COORDINATOR**  
DR. VINUTHA N,  
ASSOCIATE PROFESSOR, CSE (AI&ML), DSU

**CONFERENCE**  
DR. JAYAVENKATA VINODAVANAH, CHAIRPERSON, CSE (AI&ML), DSU

**SCHOOL OF ENGINEERING**  
1:00 pm to 2:00 pm  
Lecture hall 1  
13th November 2024



# Expert talk on "Metrics That Matter: Key Performance Indicators for Product Success"

The expert talk on "Metrics That Matter: Key Performance Indicators for Product Success" was organized by department of Computer Science & Technology for 7th semester students on 7th November 2024 from 11AM to 1PM. Session provided a deep dive into understanding and leveraging key metrics to drive product success. The speaker, an expert in product analytics, shared actionable insights on selecting, analysing, and applying KPIs to enhance product decision-making and strategy.

**SCHOOL OF ENGINEERING**  
Devarakaggalahalli, Harohalli, Kamakapura Rd, DL,Ramanagara,  
Karnataka-562112

**Expert Talk on**  
"Metrics That Matter: Key Performance Indicators for Product Success"

**Organized by**  
Department of Computer Science & Technology

**Resource Person:**  
Mr. Baskar Venugopalan,

**Date:** 7TH NOVEMBER  
**Time:** 11:00 AM-01:00PM

**Objectives**

- To understand the concept of Key Performance Indicators (KPIs) and their importance in guiding product decisions and tracking success.
- To explore core KPIs in product analytics, including metrics such as customer lifetime value (CLV), user engagement, retention rate, churn rate, and feature adoption.
- Discuss strategies to align KPIs with the broader product vision and organizational goals, ensuring data-driven roadmaps and milestones.

**Outcomes**

- Use KPI data to identify trends, uncover issues, and make recommendations for product improvements.
- Integrate KPI analysis into decision-making processes to ensure a data-informed approach to product iterations and new feature releases.
- Present and communicate KPI findings to stakeholders in a way that drives strategic conversations and decisions around product improvements.

**Patrons**

**Dr. D. Hemachandra Sagar**  
Chancellor, DSU

**Dr. D. Premachandra Sagar**  
Pro-Chancellor, DSU

**Shri. Galiwamy**  
Secretary, DSU

**Dr. Amit R Bhatt**  
Vice-Chancellor, DSU

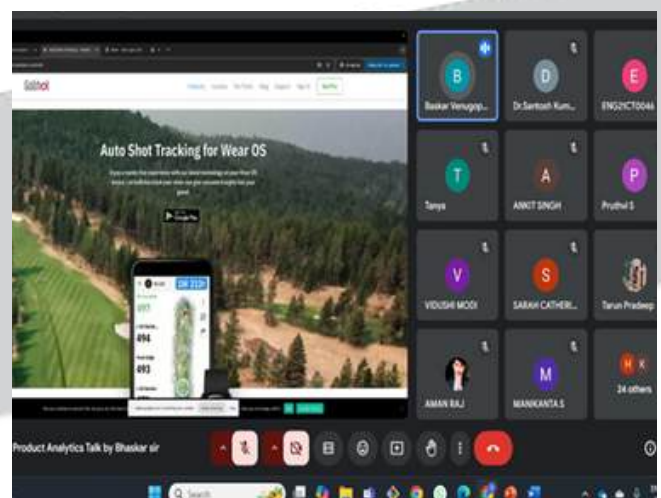
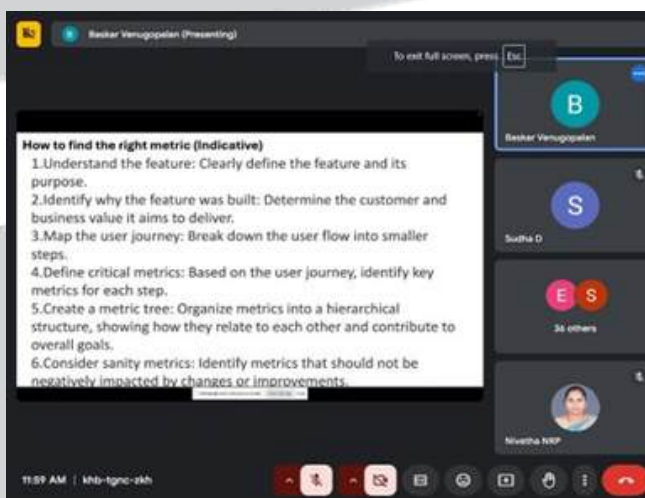
**Dr. Puttamadappa C**  
Registrar, DSU

**Dr. Uday Kumar Reddy**  
Dean- SOE

**Dr. Naveen Babu**  
Associate Dean- SOE

**Organizer**  
**Dr. D. Sudha**  
Assoc. Professor, CST  
**Prof. Vinayaka**  
Assistant Professor, CST

**Chairperson**  
**Dr. M.Shahina Parveen**  
Professor, CST



## Seminar Talk on “Biomimics”

The Department of Mechanical Engineering recently organized an insightful talk on the fascinating subject of Biomimics. The session was coordinated by Dr. Ravitej Y. P., Assistant Professor, and conducted seamlessly via Google Meet. This engaging talk delved into the principles of biomimicry, exploring how nature-inspired designs and systems can be applied to engineering solutions.

The session attracted an enthusiastic audience of faculty members and students, fostering an interactive environment that encouraged discussions on innovative approaches in research. The talk proved instrumental in broadening perspectives and identifying potential avenues for research collaboration. By highlighting real-world applications and encouraging interdisciplinary cooperation, the event served as a valuable platform for academic growth and innovative thinking.

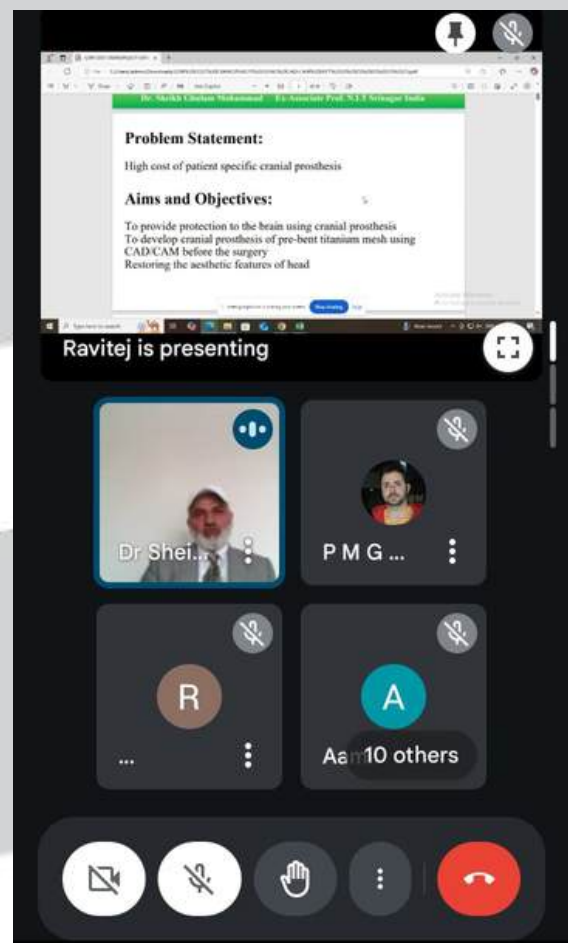


**SCHOOL OF ENGINEERING**  
Dayananda Sagar University, Bangalore  
Department of Mechanical Engineering  
warmly invites you to a value added lecture on  
**Design and Manufacture of Patient Specific Cranial Implants using CAD/CAM**

  
**Dr Sheikh Ghulam Mohammad**  
Director, University of Kashmir, North Campus  
Ex-Associate Professor, NIT Srinagar

Coordinator  
Dr Ravitej Y P  
Assistant Professor, Dept of Mechanical Engineering

  
meet.google.com/pym-eoee-oci  
Event Date: 9-11-2024





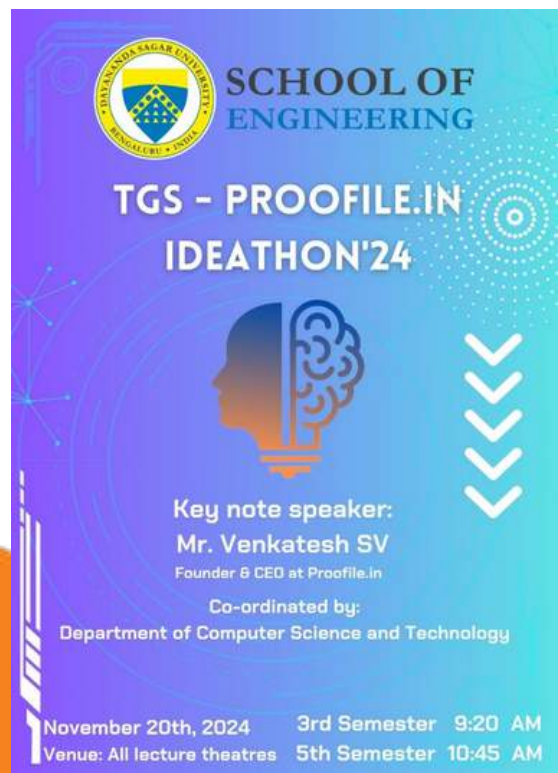
# SCHOOL OF ENGINEERING



**EVENTS: PROFESSIONAL SOCIETIES / CLUB ACTIVITIES**

## “Ideathon 24-Inauguration”

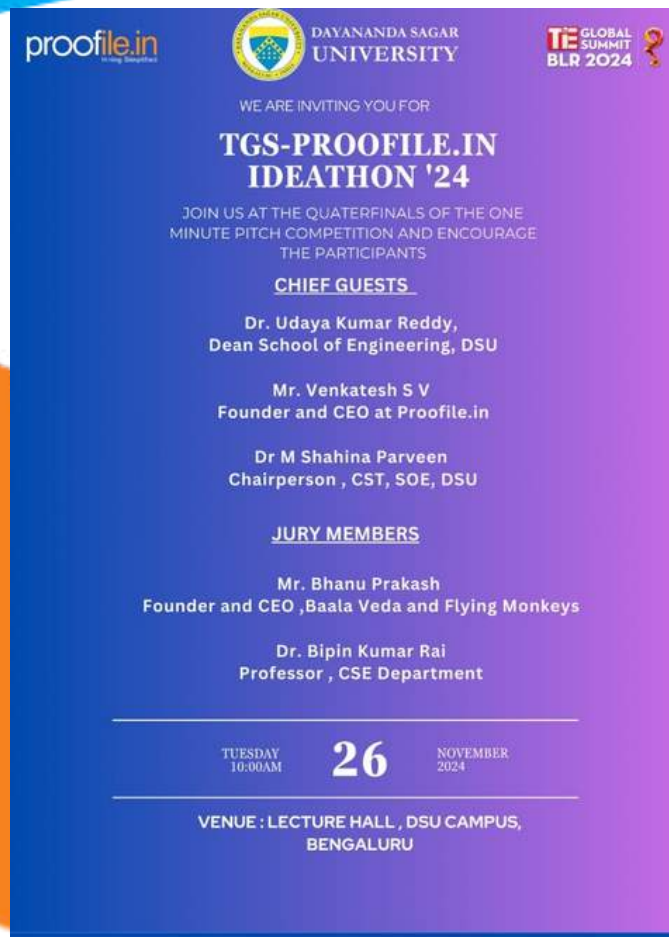
On November 20th, 2024 the School of Engineering, Dayananda Sagar University hosted an awareness program titled & quote; TGS – Profile.in Ideathon '24 for the 3rd and 5th-semester students of DAYANANDA SAGAR INSTITUTIONS. The program was led by Mr. Venkatesh SV, founder of Profile.in and Sinchana D Koushik. Who gave insights on the Start-up ecosystem and the role of students in utilizing various opportunities. Students were encouraged to Participate in the Ideathon '24, in which Over 100+ colleges, 10,000 students, and 1,000+ teams will be participating. One-Minute Pitch Competition was conducted for the interested students. The selected Teams will be allowed to participate in Quarterfinals. A semi-final will be organized on 11th December at SoE level. The finalists will be given a free Entry Pass to TiE Global Summit 2024 event at Bangalore International Exhibition Center, where futurepreneurs, investors, corporates network and share their knowledge. Cash prize of up to 2 lakhs is declared for the students who win the Ideathon. Ms. Sinchana D Koushik mentored the students.





## TGS – Profile.in Ideathon '24 Quarter Finals

The Department of Computer Science and Technology, in collaboration with the School of Engineering (SOE), organized "TGS – Profile.in Ideathon '24 Quarter Finals" for third and fifth-semester students of various branches on November 26th, 2024, in Lecture Hall 2. Dr. Udaya Kumar Reddy, Dean of the School of Engineering and Dr. Shahina Parveen, Chairperson of the Department of CS&T, welcomed Mr. Venkatesh SV (Founder and CEO of Profile.in) and Ms. Sinchana D. Kousik. The esteemed jury for this event was Mr. Bhanu Prakash (Founder and CEO of Baala Veda and Flying Monkeys) and Dr. Bipin Kumar Rai (Professor, CSE Department, SOE). The Ideathon spanned the entire day, with teams presenting their ideas and receiving valuable feedback from the jury. Over 50 teams participated in the event. The shortlisted teams will be provided with a free pass to the TiE Global Summit 2024. The winning team will be presented with a cash prize of a total worth 2 lakhs at the grand finale. Dr. Shahina Parveen, Chairperson of the Department of CS&T, concluded the event by expressing gratitude to the judges and organizers. She presented mementos as a token of appreciation.



The poster is a vertical rectangle with a blue-to-purple gradient background. At the top left is the 'profile.in' logo. At the top center is the Dayananda Sagar University logo and name. At the top right is the 'TiE GLOBAL SUMMIT BLR 2024' logo. The main text is centered and reads: 'WE ARE INVITING YOU FOR TGS-PROFILE.IN IDEATHON '24'. Below this, it says 'JOIN US AT THE QUATERFINALS OF THE ONE MINUTE PITCH COMPETITION AND ENCOURAGE THE PARTICIPANTS'. The 'CHIEF GUESTS' section lists Dr. Udaya Kumar Reddy (Dean School of Engineering, DSU), Mr. Venkatesh S V (Founder and CEO at Profile.in), and Dr M Shahina Parveen (Chairperson, CST, SOE, DSU). The 'JURY MEMBERS' section lists Mr. Bhanu Prakash (Founder and CEO, Baala Veda and Flying Monkeys) and Dr. Bipin Kumar Rai (Professor, CSE Department). At the bottom, it specifies the date as 'TUESDAY 10:00AM 26 NOVEMBER 2024' and the venue as 'LECTURE HALL, DSU CAMPUS, BENGALURU'.

profile.in

DAYANANDA SAGAR UNIVERSITY

TiE GLOBAL SUMMIT BLR 2024

WE ARE INVITING YOU FOR

**TGS-PROFILE.IN IDEATHON '24**

JOIN US AT THE QUATERFINALS OF THE ONE MINUTE PITCH COMPETITION AND ENCOURAGE THE PARTICIPANTS

**CHIEF GUESTS**

Dr. Udaya Kumar Reddy,  
Dean School of Engineering, DSU

Mr. Venkatesh S V  
Founder and CEO at Profile.in

Dr M Shahina Parveen  
Chairperson, CST, SOE, DSU

**JURY MEMBERS**

Mr. Bhanu Prakash  
Founder and CEO, Baala Veda and Flying Monkeys

Dr. Bipin Kumar Rai  
Professor, CSE Department

TUESDAY 10:00AM **26** NOVEMBER 2024

VENUE : LECTURE HALL, DSU CAMPUS, BENGALURU



## “Orientation: NTT Data at DSCE”

An orientation session organized by NTT DATA was held on 7th November 2024 at Dayananda Sagar College of Engineering (DSCE) for the 16 students from the 5th Semester, Dept of CSE (DS) selected for training with the company. This session provided the students with insights into NTT DATA’s organizational culture, expectations, and onboarding process, preparing them for the training phase and the start of their professional journey. The orientation was attended by Shivamma D. Assistant Professor, Department for CSE (Data Science) the Single Point of Contact (SPOC) for NTT DATA at Dayananda Sagar University (DSU), as well as Dr. Rashmi S., Associate Professor and I/C HOD Department for CSE (Data Science), DSCE, Mr. Guru Venkatesh, Director, Placement Cell and representatives from the NTT DATA team. The collective presence of these stakeholders underscored the institution’s commitment to supporting the students selected for training, marking an important milestone in their preparation for a successful career with NTT DATA.



## “Roboverse Club Inauguration”

The Department of Artificial Intelligence and Robotics (AIR) at Dayananda Sagar University inaugurated the Roboverse Club in a grand event dedicated to fostering innovation and collaboration among students of AI and robotics. The workshop marked a significant milestone for the department, unveiling the official logo and website of the AIR Department and the new logo for the Roboverse Club, symbolizing a commitment to technological progress and creative exploration. The event was graced by esteemed guests and faculty members. Dr. Mahesh Babu, delivering the presidential address, emphasized the importance of hosting AI-focused events under the leadership of the Roboverse office bearers. He proposed the creation of a well-structured calendar to outline upcoming activities, ensuring sustained engagement and skill development among students.



## “Lakshmi Pooja Celebration”

The DataScience@DSU Club of the Department of CSE (Data Science) organized the Lakshmi Pooja Celebration 2024 on 20th November 2024 at 11:30 pm as part of the Navaratri festivities organized by Dr. Shaila S G, Professor and Chairperson, Prof. Shivamma D and Prof. Monish L, Assistant Professor, Dept. of CSE (DS). This spiritually enriching event brought together students, faculty, and staff to honor Goddess Lakshmi, the deity of wealth, prosperity, and well-being. The event emphasized gratitude for blessings received and sought divine grace for continued academic, personal, and professional success.



## “Dance and Singing Competition”

The DataScience@DSU Club of the Department of CSE (Data Science), Dayananda Sagar University, organized a spectacular Dance and Singing Competition on 20th November 2024 from 2:00 pm to 4:00 pm organized by Dr. Shaila S G, Professor and Chairperson, Prof. Shivamma D and Prof. Monish L, Assistant Professor, Dept. of CSE (DS) for the 3rd and 5th Semester students. The event aimed to showcase the immense talent of students and provide them with a platform to express their creativity, passion, and cultural diversity. The competition brought together enthusiastic participants from various semesters, supported by an audience of students, faculty, and staff. The event highlighted the importance of extracurricular activities in fostering creativity, confidence, and camaraderie among students. The event featured a distinguished panel of judges comprising Dr. Rochna Roy, Assistant Professor, Department of Basic Sciences who provided valuable feedback to the participants and encouraged them to excel further.





Ramanagara, Karnataka, India  
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20/11/24 02:43 PM



Ramanagara, Karnataka, India  
MC6X+6RP, Kanakapura Rd, Harohalli, Karnataka 562112, India  
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20/11/24 02:36 PM



Ramanagara, Karnataka, India  
MC6X+6RP, Kanakapura Rd, Harohalli, Karnataka 562112, India  
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Ramanagara, Karnataka, India  
MC6X+6RP, Kanakapura Rd, Harohalli, Karnataka 562112, India  
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## “Donation on the occasion of Children’s Day”

On November 14, 2024, the Department of Aerospace Engineering hosted a donation camp for students at the Thirumurthy Rural Development Centre on Kanakapura Road. Students from the second, third, and fourth years, as well as faculty from the department, actively engaged in this event by giving the Thirumurthy Rural Development Centre’s necessities and interacting with orphaned students. This event was planned in honor of Children's Day.



## DSU ACM & FSD Club Presents: A One-of-a-Kind Internship & Hackathon Experience with CaptainSide

DSU ACM & FSD Club has collaborated with CaptainSide, an innovative Web3-based gaming marketplace startup, to bring an internship opportunity like no other. CaptainSide is a cutting-edge startup revolutionizing the world of gaming with blockchain and Web3 technologies. This unique event featured a Hands-on Workshop which was held on 25th November and a 6-hour Hackathon, held on 27th November, which has brought together aspiring tech enthusiasts and creative minds to dive into the world of Full-stack web development. The faculty Coordinators of the event were Dr. Meenakshi Malhotra Associate Professor and Dr. Gousia Thahniyath Assistant Professor, CSE.

**DAYANANDA SAGAR UNIVERSITY**  
Devarakaggahalli, Harihalli, Kanakapura Road, Ramnagara-562112, Karnataka, India

SCHOOL OF ENGINEERING  
INSTITUTIONS INNOVATION COUNCIL

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING PRESENTS

acm STUDENT CHAPTER

**BUILD IT**  
POWERED BY CAPTAINSIDE

6 HOUR HACKATHON  
ON  
FULLSTACK WEB DEVELOPMENT

**G&T & NEXT.JS  
WORKSHOP**  
On  
25th November 2024  
&  
**HACKATHON**  
On  
27th November 2024

Get chance to get an **internship of 6-7k**  
and work experience in a startup

1 PERSON TEAM  
**5000 INR  
CASH PRIZE**

VENUE: LH-2,  
DAYANANDA SAGAR UNIVERSITY,  
HAROHALLI, BANGALORE

150 REGISTRATION FEES

Conveners :-  
**Dr. Udaya Kumar Reddy KR**  
Dean, SdE, DSU  
**Dr. Girisha G S**  
Chairperson, CSE, SdE, DSU

Faculty Coordinators :-  
**Dr. Meenakshi Malhotra**  
Asso. Professor, CSE  
**Dr. Gousia Thahniyath**  
Assistant Professor, CSE

Keynote Speakers :-  
**Patel Muhammad  
S Shreenidhi  
G Nithesh  
Harshith**

Student Coordinators :-  
**Sameer S Kette**  
7336544449  
**Utkarsh Priya**  
8938633205

QR Code

## “Outreach Activity - Art of Living International Centre”

The Department of CSE (AI&ML) organized a two-day outreach activity to the “Art of Living International Center” Bangalore on November 11-12, 2024, providing students and faculty with an enriching experience focused on holistic practices, mindfulness, and cultural values. The event included a Bhastrika Pranayama session and a 20-minute guided meditation, promoting stress relief and mindfulness. Participants also visited the Gaushala, gaining insights into ethical animal care and rural sustainability, and the Gurukul, where they explored traditional learning methodologies and ancient Indian spiritual practices.

An introductory session on Art of Living’s values was followed by guided meditation, emphasizing personal development and self-reflection. Participants also enjoyed a Satvik lunch, experiencing nutritious, balanced meals aligned with the wellness theme of the event. Faculty members, including Dr. Bahubali and team on the first day and Dr. Vinutha and team on the second day, played a key role in ensuring the event's success by guiding and supporting students throughout.





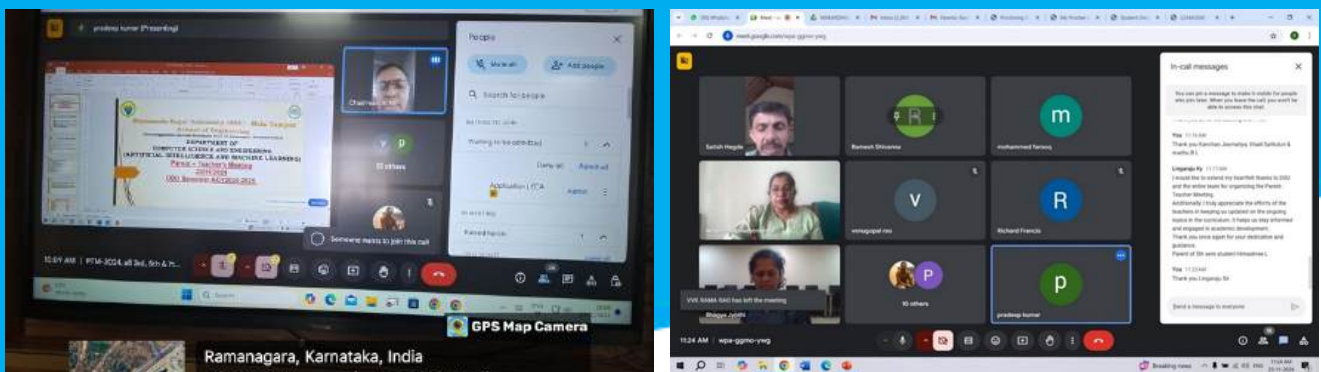
## “Exploring Opportunities: Collaborative Research Summit”

A collaboration meeting was convened to discuss the department’s future activities, collaborations, and funding strategies. The meeting was attended by HODs, Dr. Abhra Roy Chowdhury, Dr. Pavelyev Valdimir S., and other professors, aiming to outline a roadmap for the growth and impact of the department. The primary agenda included discussions on the role of robotics and AI in the present and future, opportunities for international collaboration, and strategies for securing necessary resources for the department’s initiatives. The meeting concluded on a positive note, with clear directions set for the department's future growth. The collaboration with IISc and other prestigious institutions, along with a structured approach to fundraising, will play a crucial role in the department’s development. Professors and esteemed delegates expressed their commitment to supporting the department's initiatives and contributing to its success. The meeting ended and the department’s journey had begun with a common goal: to turn visions into realities and lead the way into a future shaped by ingenuity and hope.



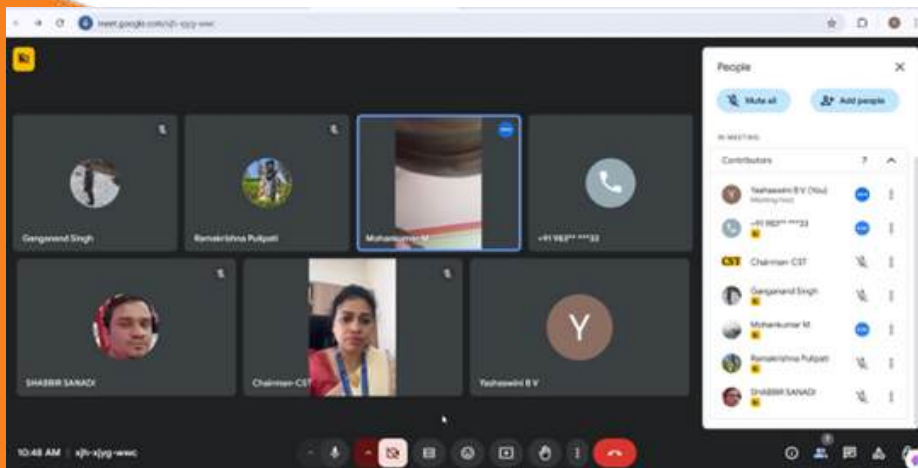
## “Parent-Teacher Meeting (PTM) - AI&ML”

The Department of Computer Science & Engineering (AI & ML) conducted a Parent-Teacher Meeting (PTM) for 3rd, 5th, and 7th-semester students on Saturday, November 23, 2024, from 10:00 AM to 12:00 PM. The meeting focused on students' academic performance, attendance, and overall progress, encouraging collaborative efforts for their development.



## “Parent Teacher Meeting – 3rd Semester CST”

Parents Teachers Meeting started as per the scheduled date and time by welcoming the parents who joined the meeting by Dr. M. Shahina Parveen, Chairperson, Dept. of CST. The class advisor formally addressed parents, emphasizing the significance of Parent-Teacher Meetings (PTMs) at the university level. The class advisor discussed the attendance policy, stressing a minimum requirement of 75%. Consequences for failing to meet this requirement were outlined, emphasizing ineligibility for the Semester End Examinations (SEE). Parents were informed about their ward's attendance percentage, MSE-1 & MSE-2 marks in all subjects, and SEE.



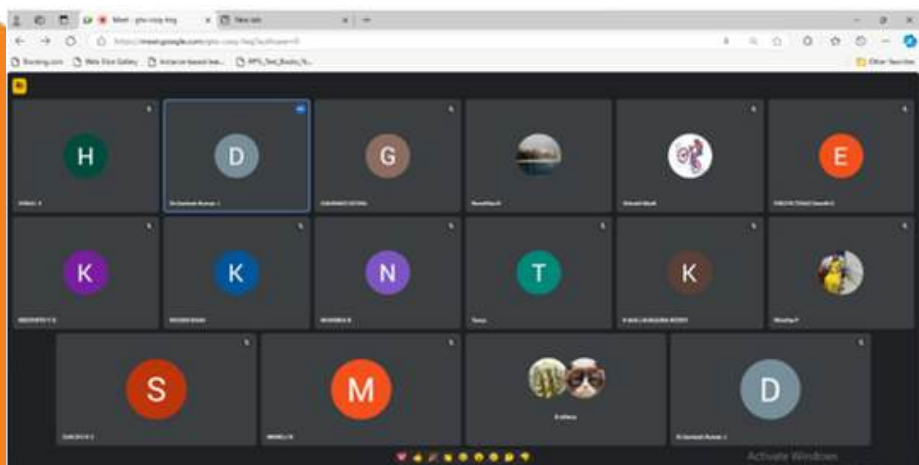
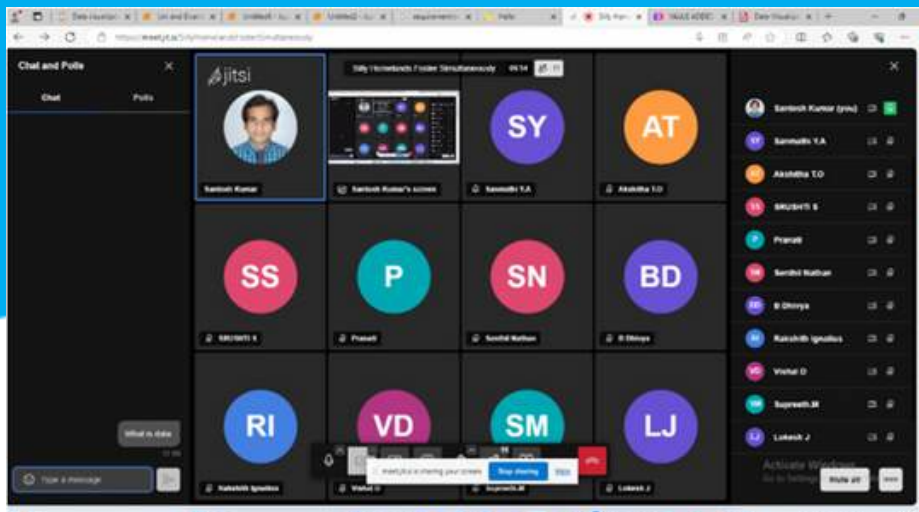
## “Parent Teacher Meeting – 5th Semester CST”

The Parent Teacher's meeting commenced as scheduled, with a warm welcome extended to parents who joined both online and offline. The class advisor formally addressed the parents, highlighting the importance of Parent-Teacher Meetings (PTMs) at the university level. A total of six parents participated in this hybrid meeting. The class advisor discussed the attendance policy, emphasizing the necessity of maintaining a minimum of 75% attendance. The consequences of not meeting this requirement were clearly outlined, including ineligibility for the Semester End Examinations (SEE). Parents were also informed about their ward's attendance percentage, MSE-1 marks in all subjects, and the 60:40 split-up scheme.



## “Parent Teacher Meeting – 7th Semester CST”

The Parent Teacher's meeting commenced as scheduled, with a warm welcome extended to parents who joined both online and offline. The class advisor emphasized the importance and outlined the department's achievements, best practices, and attendance policy, stressing the necessity of maintaining a minimum of 75%. Failure to meet this requirement would result in ineligibility for the Semester End Examinations (SEE), a consequence that was communicated. Additionally, parents were provided with details regarding their ward's attendance percentage, MSE-1 marks across all subjects, and an explanation of the 60:40 split-up scheme.





# SCHOOL OF ENGINEERING



## INDUSTRIAL VISIT

## “Industrial Visit – Fanuc”

The Department of Mechanical Engineering organized an Industry Visit to Fanuc India – Industrial Automation Company in Bommasandra on 27th November. 5th Sem Mechanical Engineering students have visited the company. The Industrial visit benefited students with a wider exposure to a variety of situations that challenge them to apply their theoretical knowledge in practical scenarios. This exposure is crucial in developing a range of skills – from technical know-how to critical thinking and problem-solving abilities.



## “Industrial Visit – Krishi Mela at GKVK”

As part of the "Technologies for Rural India" course, the 5th-semester Mechanical Engineering students from Dayananda Sagar University visited the GKVK campus on November 15, 2024. The visit was organized under the guidance of Dr. Vinayak B Hemadri and Dr. Viswanathan R, who aimed to expose students to the latest advancements in agricultural technologies and their applications in rural development. The primary objective of this visit was to provide students with practical insights into modern agricultural practices and technologies that are pivotal in transforming rural agriculture sectors. It was intended to bridge the gap between theoretical knowledge and real-world applications, empowering students with the understanding needed to innovate and implement sustainable technologies in rural India.



## “Industrial Visit – Bosch Bidadi”

On 29th November 2024, students of the 3rd Sem, Mechanical Engineering Department visited the Bosch Bidadi Plant from 9:00 AM to 2:00 PM. Our student, Mr. S Ananth played the active role of student coordinator. The day began with a warm welcome at the plant, especially by Mr. S. Ravindran (Technical Functions - Facility Management, BidP1/FCM), who guided the visit thoroughly, followed by a comprehensive tour of the state-of-the-art manufacturing facility. During the visit, students observed Bosch's advanced production processes, including automated assembly lines, robotics, and precision testing of automotive components like fuel injectors and starters. They also learned about the company's cutting-edge R&D in automotive technology and sustainability initiatives, such as energy-saving measures and waste-reduction practices. A session with Bosch engineers provided insights into the company's work culture, future innovations like AI and digital twins, and career opportunities. The visit was a valuable opportunity for students to apply theoretical knowledge to real-world industrial practices and gain exposure to the latest advancements in technology and manufacturing processes. This industrial visit was coordinated by Dr. P M G Bashir Asdaque and Dr. Manish Mishra.





# SCHOOL OF ENGINEERING



## **FACULTY ACHIEVEMENTS**



**Dr. M V Hanumantha Rao**  
**Research Professor**  
**Department of Physics**

- Dr. M.V.H. Rao, Research Professor in the Department of Physics, participated in and presented a poster paper at the 47th OSI Symposium and International Conference on Advances in Optics and Photonics Instrumentation (OPTOIn-2024), held in Chandigarh and organized by CSIR-CSIO from October 23 to 25, 2024. The title of the paper was "Design of a Broadband Polarization Beam Splitter Based on Thin Film Optical Interference."





**Dr. Bhavana Rikhari**  
**Assistant Professor**  
**Department of Chemistry**

- Dr. Bhavana Rikhari, Assistant Professor, presented a research paper titled “at the International Conference on Innovative Materials (ICIM – 2024), organized by St. Stephen’s College, Uzhavoor, on November 21 and 22, 2024.



- Dr. Bhavana Rikhari, Assistant Professor, participated in an international-level Faculty Development Program on “Advanced Materials for Energy, Environmental, and Biological Applications,” organized by the Division of Chemistry, SRM Institute of Science and Technology, Tiruchirappalli, from November 4 to November 9, 2024.



**Dr. Rajesh Cheruku**  
Associate Professor  
Department of Physics

- Dr. Rajesh Cheruku, Associate Professor, has received an ISRO-RESPOND project titled "Indigenization of Thickness Monitor for Precise Control of Thin-Film Depositions in Optical Coating Applications." The project is funded under the RESPOND Programme for a duration of two years, with a total outlay of ₹27,97,200 (Rupees Twenty-Seven Lakhs Ninety-Seven Thousand Two Hundred only).



**Dr. Sai Prasad Nayak**  
Assistant Professor  
Department of Chemistry

- Dr. Sai Prasad Nayak, Assistant Professor, published a book chapter titled "Surface Plasmon Resonance Waveguides and Their Applications: Insights from Functional Metal–Dielectric–Metal Interfaces" in Nano-Engineering at Functional Interfaces for Multi-Disciplinary Applications (pp. 93–121), Elsevier, 2025. DOI: <https://doi.org/10.1016/B978-0-443-21691-6.00006-8>.



## Nano-Engineering at Functional Interfaces for Multi-Disciplinary Applications

Electrochemistry, Photoplasmonics, Antimicrobials, and Anticancer Applications

Micro and Nano Technologies

2025, Pages 93-121



### Chapter 5 - Surface plasmon resonance waveguides and their applications: insights from functional metal–dielectric–metal interfaces

Kalathur Mohan Ganesh<sup>1</sup>, S. Sudha Maria Lis<sup>2</sup>, Sai Prasad Nayak<sup>3</sup>, Pratyusha Das<sup>4</sup>, Seemesh Bhaskar<sup>5</sup>, Narendro Reddy<sup>6</sup>, Md. Amzad Hossain<sup>7</sup>, Carani B. Sanjeevi<sup>8</sup>, Sai Sathish Ramamurthy<sup>1,9</sup>, B.N. Shivakiran Bhaktha<sup>2</sup>

<sup>1</sup> STAR Laboratory, Department of Chemistry, Sri Sathya Sai Institute of Higher Learning, Prasanthi Nilayam, Sri Sathya Sai District, Puttaparthi, Andhra Pradesh, India

<sup>2</sup> Department of Physics, Indian Institute of Technology Kharagpur, Kharagpur, West Bengal, India

<sup>3</sup> Department of Chemistry, Dayananda Sagar University, Bangalore, Karnataka, India

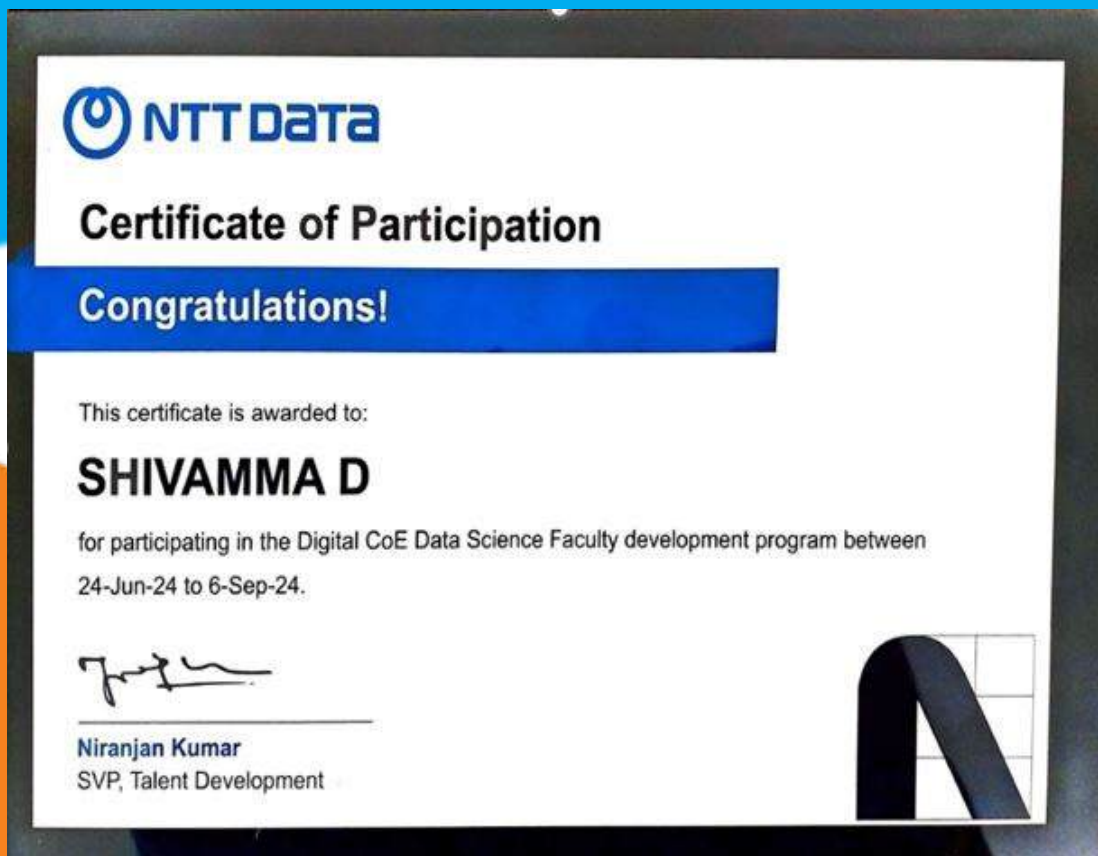
- Dr. Sai Prasad Nayak, Assistant Professor presented a research paper at the International Conference on Innovative Materials (ICIM) 2024, organized by the Department of Physics, St. Stephen's College, Uzhavoor, Kottayam, Kerala-68634, on November 21–22, 2024.





**Prof. Shivamma D**  
**Assistant Professor**  
**Department of CSE(DS)**

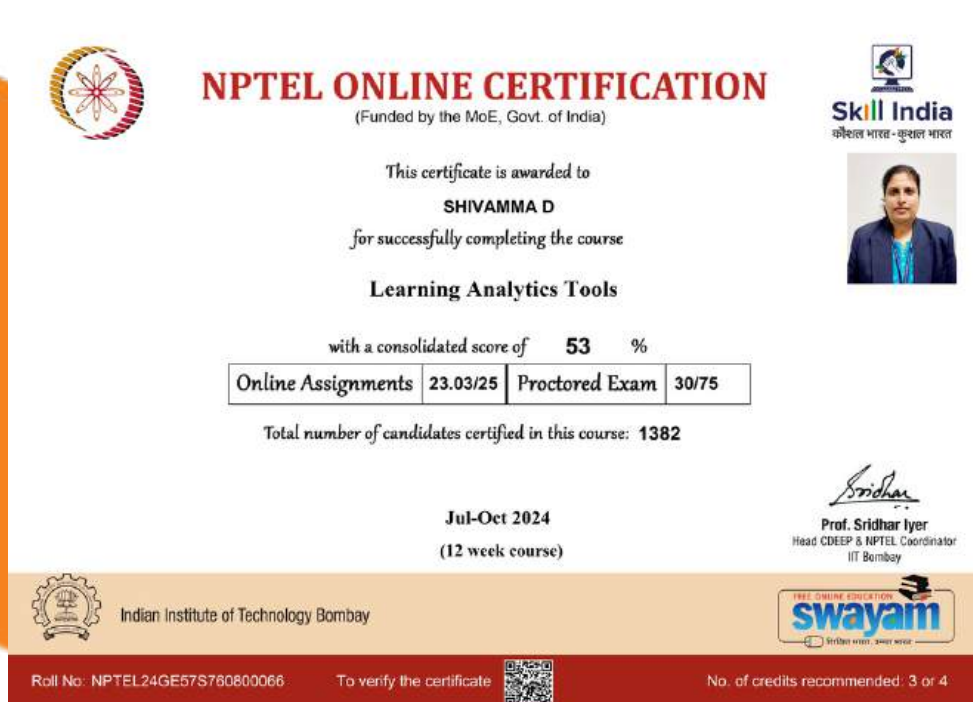
- Prof. Shivamma D has participated in the Digital CoE Data Science - Faculty Development Program between 24th June 2024 to 6th September 2024 organized by the NTT DATA



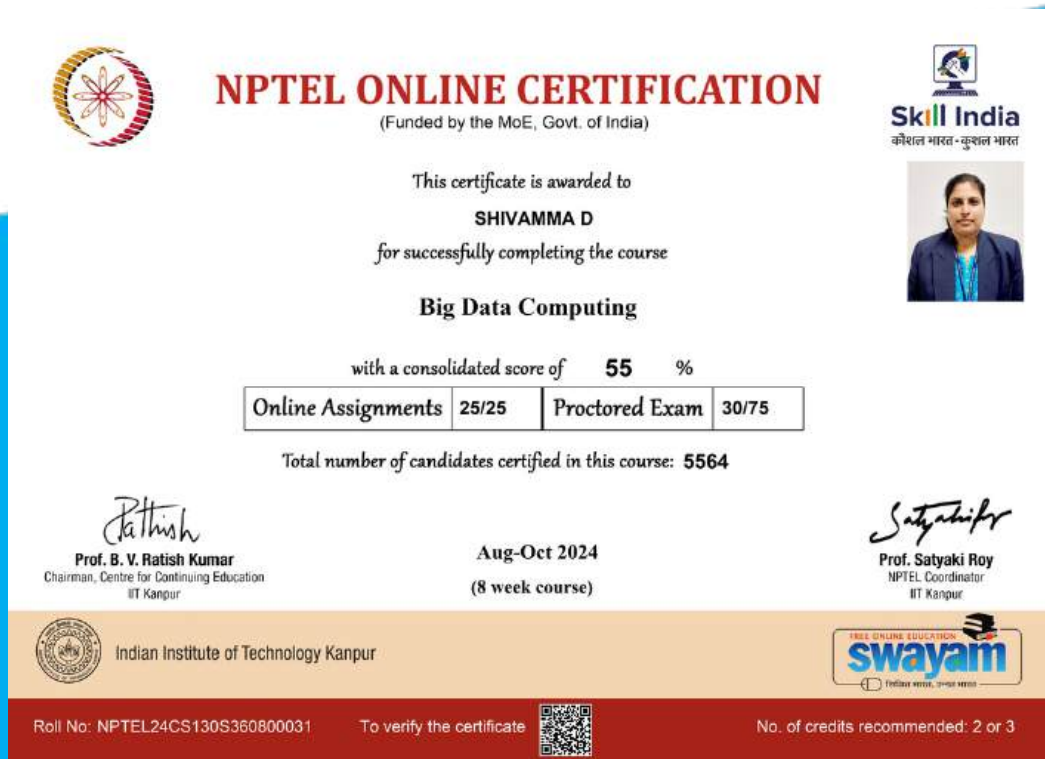
- Prof. Shivamma D has participated in the MATLAB EXPO 2024 workshop organized by the MathWorks during November 13-14,2024.



- Prof. Shivamma D has successfully completed the Learning Analytics Tools of NPTEL Online Certification Course of 12 weeks during Jul-Oct 2024.



- Prof. Shivamma D has successfully completed the Big Data Computing of NPTEL Online Certification Course of 8 weeks during Aug-Oct 2024.



**NPTEL ONLINE CERTIFICATION**  
(Funded by the MoE, Govt. of India)

This certificate is awarded to  
**SHIVAMMA D**  
for successfully completing the course  
**Big Data Computing**  
with a consolidated score of **55** %

Online Assignments	25/25	Proctored Exam	30/75
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Total number of candidates certified in this course: **5564**

Prof. B. V. Ratish Kumar  
Chairman, Centre for Continuing Education  
IIT Kanpur

Aug-Oct 2024  
(8 week course)

Prof. Satyaki Roy  
NPTEL Coordinator  
IIT Kanpur

Indian Institute of Technology Kanpur

Roll No: NPTEL24CS130S360800031      To verify the certificate      No. of credits recommended: 2 or 3



**Prof. Hari Haran**  
**Assistant Professor**  
**Department of Mathematics**

- Prof. Hari Haran has published an article "Transmission Dynamics of Fractional Order SVEIR Model for African Swine Fever Virus with Optimal Control Analysis" in the journal "Scientific Reports" published by Springer Nature in Nov 2024. It is a Scopus indexed Q1 journal with impact factor of 3.8 for the year 2024 by SCImago Journal Rank (SJR).



**Dr. U. Pavan Kumar**  
**Assistant Professor**  
**Department of CSE(DS)**

- Dr. U. Pavan Kumar has participated in the MATLAB EXPO 2024 workshop organized by MathWorks during November 13-14, 2024
- Dr. U. Pavan Kumar has attended the webinar for the Faculty Development Program on Principles of Outcome-Based Education Organized by Vmedulife software on 26th November 2024





**Dr. Dilip Kumar Jang Bahadur Saini**  
Associate Professor  
Department of CSE(CY)

- Dr. Dilip Kumar Jung Bahadur Saini has presented an IEEE paper entitled “Big-Data based Framework for Disease Detection and Drug Recommendation System” at the Second International Conference on Pervasive Computing Advances and Applications (PerCAA- 2024) held on October 18 - 19, 2024, organized by Poornima College of Engineering, Jaipur, Rajasthan, India.



- Dr. Dilip Kumar Jung Bahadur Saini has acted as Session Chair at the 3rd International Conference on Innovative Research and Development (ICIRD-2024) held between 8th-11th November 2024 at Shinawatra University, Thailand.


**SHINAWATRA UNIVERSITY**  
 FOSTERING INNOVATION

**3<sup>rd</sup> INTERNATIONAL CONFERENCE ON INNOVATIVE RESEARCH AND DEVELOPMENT (ICIRD - 2024)**

08<sup>th</sup> - 11<sup>th</sup> November 2024  
 Shinawatra University, Thailand








**Certificate of Appreciation**

This certificate is awarded to

**DR. DILIPKUMAR JANG BAHADUR SAINI**  
 SCHOOL OF ENGINEERING  
 DAYANANDA SAGAR UNIVERSITY  
 BANGALORE KARNATAKA, INDIA

**SESSION CHAIR**

at the 3<sup>rd</sup> INTERNATIONAL CONFERENCE ON INNOVATIVE RESEARCH AND DEVELOPMENT (ICIRD-2024) held between 08<sup>th</sup> - 11<sup>th</sup> November, 2024 at Shinawatra University, Thailand.

We honor your expertise, leadership, and dedication to ensuring the success of the Technical Sessions.

Organized by  
 Shinawatra University, Thailand  
 S.E.A College of Engineering and Technology, Bengaluru, India  
 Stella Matutina College of Education  
 ESN Publications, India.

  
**Dr. K. J. Varghese**  
 Dean and Associate Professor of English,  
 Christ College (Autonomous) Irinjalkuda, Kerala.

  
**Dr. B. Venkata Narayana**  
 Principal S.E.A CET  
 Bengaluru, Karnataka.

  
**Dr. Joseph Catherine**  
 Principal,  
 Stella Matutina College of Education, Chennai.

  
**Dr. J. Banuchandar**  
 Founder and Chairman,  
 ESN Publications,  
 India.

  
**Dr. Venja Denmen Claver**  
 Manager of International Relations,  
 Lecturer, Faculty of Management  
 Shinawatra University

  
**Dr. Zhou Fei**  
 President,  
 Shinawatra University,  
 Thailand.

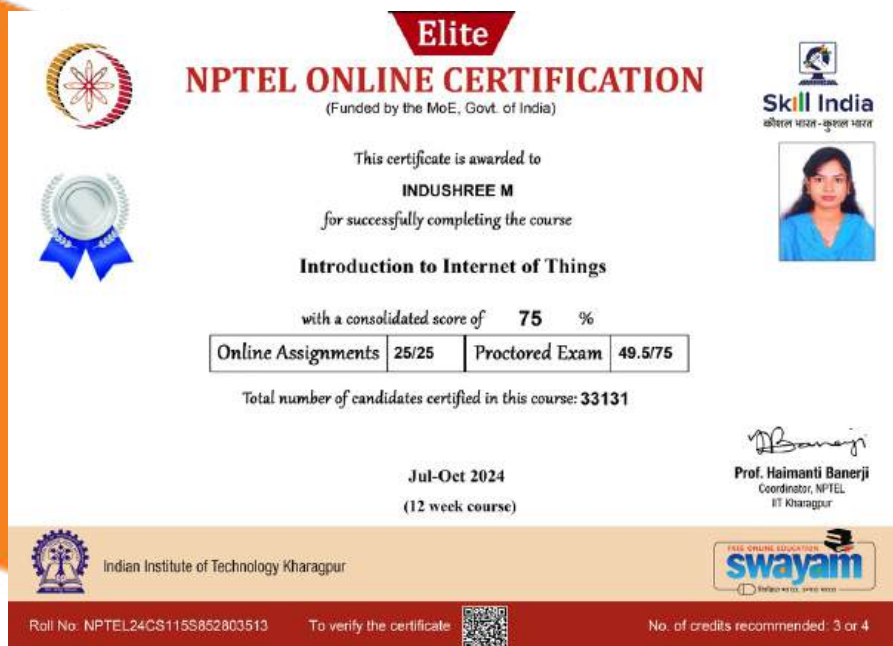


**Dr. Indushree M**  
**Assistant Professor**  
**Department of CSE(CY)**

- Dr.M.Indushree has participated in the Digital CoE Full Stack Faculty Development Program between 24th June 2024 to 23rd August 2024.



- Dr.M.Indushree has successfully completed 12-week online NPTEL certification Course and Faculty development program for the course titled “Introduction to Internet of Things” with Elite certification and score of 75% during July-October 2024.





**Prof. Sharanabasappa Tadkal**  
Assistant Professor  
Department of CSE(CY)

- Prof. Sharanabasappa Tadkal has successfully completed a 12 week, online NPTEL Certification course titled “Practical Cyber Security for Cyber Security Practitioners” with a consolidation score of 76% during July-October 2024.

**Elite**

**NPTEL ONLINE CERTIFICATION**  
(Funded by the MoE, Govt. of India)

This certificate is awarded to  
**SHARANABASAPPA TADKAL**  
for successfully completing the course  
**Practical Cyber Security for Cyber  
Security Practitioners**  
with a consolidated score of **76** %

Online Assignments	24.69/25	Proctored Exam	51/75
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Total number of candidates certified in this course: **1625**

Jul-Oct 2024  
(12 week course)

Total number of candidates certified in this course: **1625**

Indian Institute of Technology Kanpur

No. of credits recommended: 3 or 4


Roll No: NPTEL24CS85S352806016 To verify the certificate 

Prof. B. V. Ratish Kumar  
Chairman, Centre for Continuing Education  
IIT Kanpur

Prof. Satyaki Roy  
NPTEL Coordinator  
IIT Kanpur

Skill India  
कौशल भारत - कुशल भारत

swayam  
FREE ONLINE EDUCATION  
एनपीटीईल एनपीटीईल एनपीटीईल





**Prof. Ranjima P**  
**Assistant Professor**  
**Department of CSE(CY)**

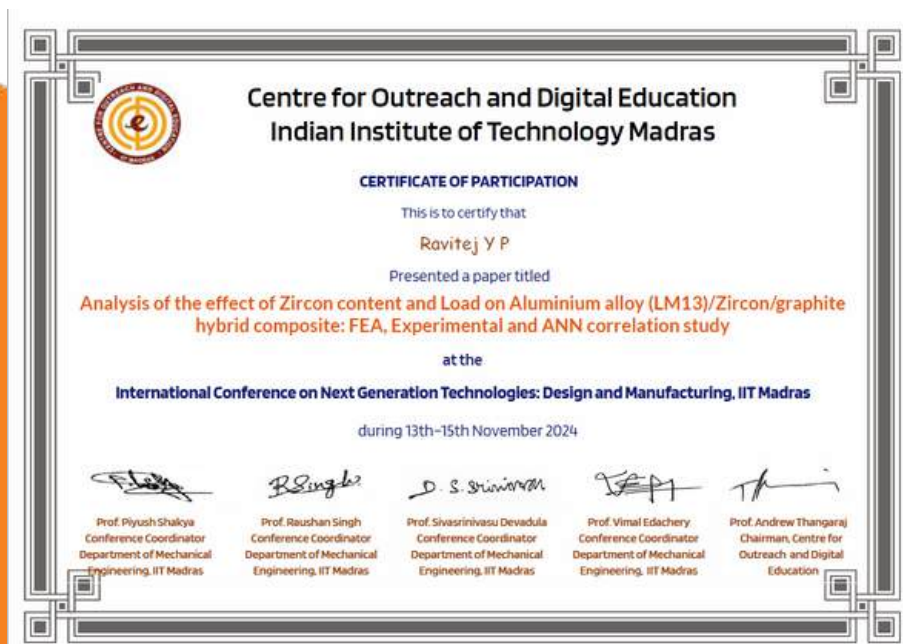
- Prof.P.Ranjima has participated in the Five days online Faculty Development Program organized by the Department of Computer Science and Engineering from “INFO Institute of Engineering” from 18.11.2024 to 22.11.2024.
- Prof.P.Ranjima has successfully completed a 12-week online NPTEL certification Course titled “Ethical Hacking” with a consolidated score of 68% during July-October 2024.





**Prof. Ravitej Y P**  
**Assistant Professor**  
**Department of ME**

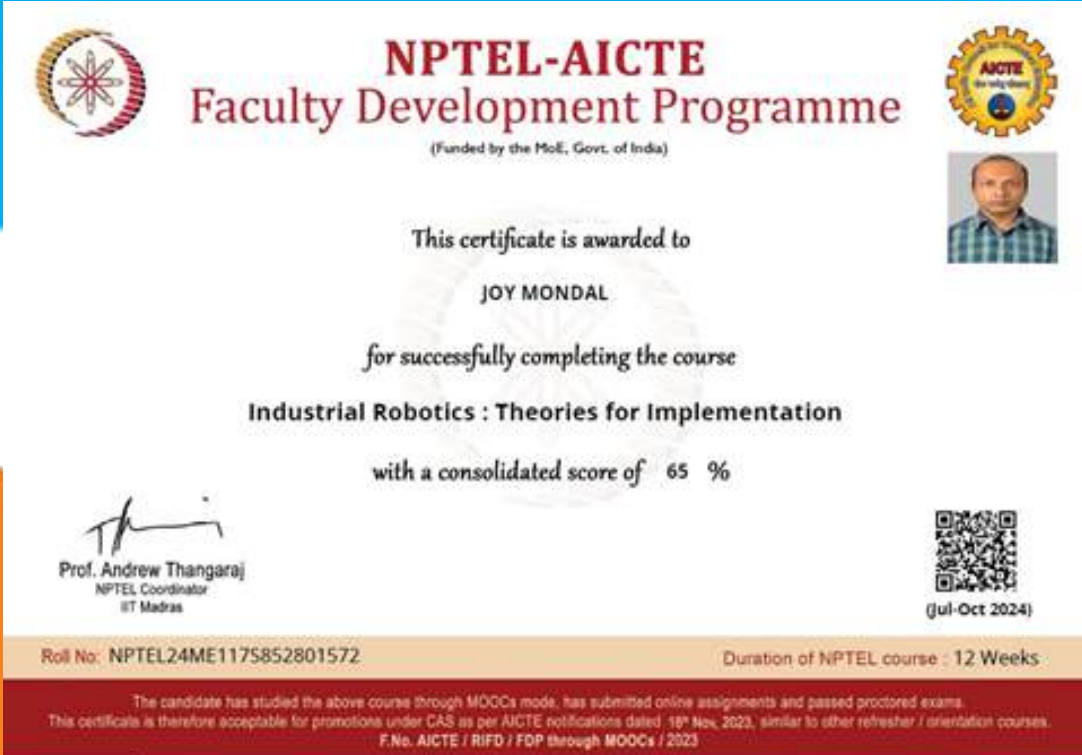
- Dr. Ravitej Y P, Assistant Professor, Mechanical Engineering Department attended an international conference named The International Conference on Next Generation Technologies: Design and Manufacturing (ICNGT 2024) held at IIT Madras from November 13 to 15, 2024.





**Dr. Joy Mondal**  
Assistant Professor  
Department of ME

- Prof. Joy Mondal., has successfully completed a 12-week online NPTEL certification Course titled “Theories of Implementation” during July-October 2024.



The certificate is awarded to  
**JOY MONDAL**  
for successfully completing the course  
**Industrial Robotics : Theories for Implementation**  
with a consolidated score of **65 %**

Prof. Andrew Thangaraj  
NPTEL Coordinator  
IIT Madras

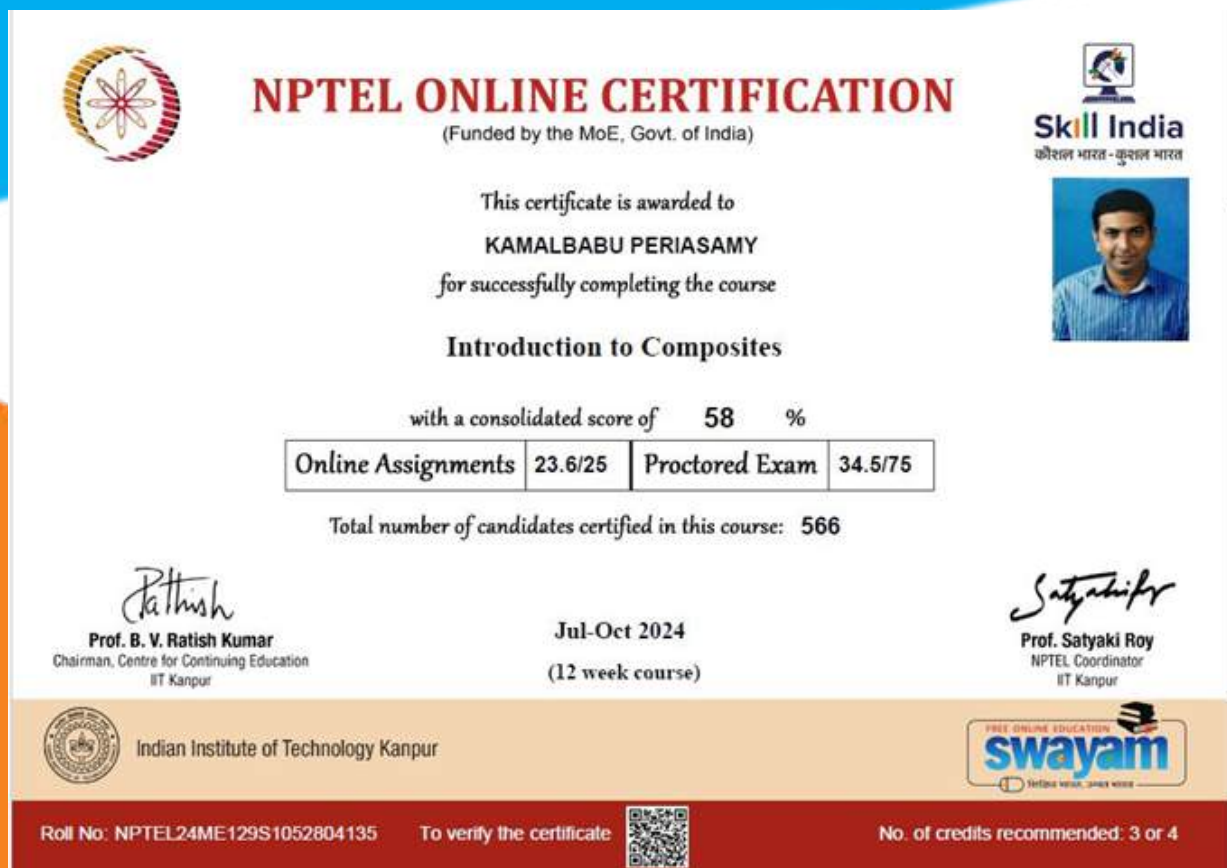
Roll No: NPTEL24ME117S852801572      Duration of NPTEL course : 12 Weeks

The candidate has studied the above course through MOOCs mode, has submitted online assignments and passed proctored exams.  
This certificate is therefore acceptable for promotions under CAS as per AICTE notifications dated 18<sup>th</sup> Nov, 2023, similar to other refresher / orientation courses.  
F.No. AICTE / RIFD / FDP through MOOCs / 2023



**Dr. Kamalbabu P**  
Assistant Professor  
Department of ME

- Dr. Kamalbabu Periasamy., has successfully completed a 12-week online NPTEL certification Course titled “Introduction to Composites” during July-October 2024.



The certificate is titled "NPTEL ONLINE CERTIFICATION" and is funded by the Ministry of Education, Government of India. It is awarded to KAMALBABU PERIASAMY for successfully completing the course "Introduction to Composites" with a consolidated score of 58%. The certificate includes a table of scores for Online Assignments (23.6/25) and Proctored Exam (34.5/75). It also mentions that a total of 566 candidates were certified in this course. The certificate is signed by Prof. B. V. Ratish Kumar, Chairman of the Centre for Continuing Education at IIT Kanpur, and Prof. Satyaki Roy, NPTEL Coordinator at IIT Kanpur, for the period of Jul-Oct 2024 (12 week course). The certificate features the logos of NPTEL, Skill India, and Swayam.

**NPTEL ONLINE CERTIFICATION**  
(Funded by the MoE, Govt. of India)

This certificate is awarded to  
**KAMALBABU PERIASAMY**  
for successfully completing the course  
**Introduction to Composites**  
with a consolidated score of **58 %**

Online Assignments	23.6/25	Proctored Exam	34.5/75
--------------------	---------	----------------	---------

Total number of candidates certified in this course: 566

**Prof. B. V. Ratish Kumar**  
Chairman, Centre for Continuing Education  
IIT Kanpur

Jul-Oct 2024  
(12 week course)

**Prof. Satyaki Roy**  
NPTEL Coordinator  
IIT Kanpur

Indian Institute of Technology Kanpur

swayam

Roll No: NPTEL24ME129S1052804135 To verify the certificate

No. of credits recommended: 3 or 4



**Prof. Abhilash O**  
Assistant Professor  
Department of ME

- Prof. Abhilash Onkarappa., has successfully completed a 12-week online NPTEL certification Course titled “Sustainable Energy Technology” during July-October 2024.



The certificate is titled "NPTEL ONLINE CERTIFICATION" and is funded by the Ministry of Education, Government of India. It is awarded to **ABHILASH ONKARAPPA** for successfully completing the course "Sustainable Energy Technology" with a consolidated score of **44 %**. The certificate includes a table of performance metrics and a QR code for verification.

Online Assignments	14.13/25	Proctored Exam	30/75
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Total number of candidates certified in this course: 898

The certificate is signed by Prof. B Umashankar, Chairperson, Centre for Continued Education (CCE), IIT Hyderabad, and Prof. Andrew Thangaraj, NPTEL Coordinator, IIT Madras. The course was held from Jul-Oct 2024 (12 week course). The certificate is issued by the Indian Institute of Technology Hyderabad and is part of the Swayam program.

Roll No: NPTEL24ME144S954700038      To verify the certificate      No. of credits recommended: 3 or 4



**Dr. Viswanathan R**  
**Associate Professor**  
**Department of ME**

- Dr. Viswanathan R., has successfully completed 12-week online NPTEL certification Course titled “Artificial Intelligence and Machine Learning in Materials Engineering” during July-October 2024.

**Elite**

**NPTEL ONLINE CERTIFICATION**  
(Funded by the MoE, Govt. of India)

This certificate is awarded to  
**VISWANATHAN R**  
for successfully completing the course  
**Artificial Intelligence and Machine Learning in  
Materials Engineering**  
with a consolidated score of **76** %

Online Assignments	22.38/25	Proctored Exam	54/75
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Total number of candidates certified in this course: 458


Jul-Oct 2024  
(12 week course)

Prof. B. V. Ratish Kumar  
Chairman, Centre for Continuing Education  
IIT Kanpur

Prof. Satyaki Roy  
NPTEL Coordinator  
IIT Kanpur

Indian Institute of Technology Kanpur

swayam  
FREE ONLINE EDUCATION  
एनपीटीईल एजुकेशन, ज्ञानेन विद्या

Roll No: NPTEL24CE107S752803870      To verify the certificate       No. of credits recommended: 3 or 4



**Dr. Rahul Kumar**  
Assistant Professor  
Department of ME

- Dr. Rahul Kumar., has successfully completed a 12-week online NPTEL certification Course titled “Artificial Intelligence and Machine Learning in Materials Engineering” during July-October 2024.

**Elite**

**NPTEL ONLINE CERTIFICATION**  
(Funded by the MoE, Govt. of India)

This certificate is awarded to  
**RAHUL KUMAR**  
for successfully completing the course  
**Artificial Intelligence and Machine Learning in  
Materials Engineering**  
with a consolidated score of **69** %

Online Assignments	24.06/25	Proctored Exam	45/75
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Total number of candidates certified in this course: 458

Jul-Oct 2024  
(12 week course)

Prof. B. V. Ratish Kumar  
Chairman, Centre for Continuing Education  
IIT Kanpur

Prof. Satyaki Roy  
NPTEL Coordinator  
IIT Kanpur

Indian Institute of Technology Kanpur

swayam

Roll No: NPTEL24CE107S752806662      To verify the certificate       No. of credits recommended: 3 or 4

- Dr. Rahul Kumar, Assistant Professor has participated and presented a paper titled “Experimental investigation of corrosion behavior of zircon sand and molybdenum disulphide reinforced ZA-27 hybrid metal matrix composites” at the 2nd International Conference on Recent Innovations & Developments in Mechanical Engineering, organized by the Department of Mechanical Engineering, NIT Meghalaya, India during 14th to 16th November 2024.





**Dr. Rupam Bhaduri**  
Professor  
Department of AI&R

- Dr. Rupam Bhaduri, Professor (Research and Academics) in the AI & Robotics Engineering Department, along with his research scholars, has achieved a significant milestone with a publication in a prestigious Quartile-1 (Q1) journal. The paper, titled "Perovskite Solar Cell Stability Analysis Using Entropy-Based Support Vector Machine Learning," was published in *Progress in Photovoltaics: Research and Applications* (DOI: 10.1002/pip.3861), an SCI, Scopus, and WOS Indexed journal with an impressive Impact Factor of 8.0, by J. Wiley & Sons, USA & UK.

**(2) Dr. Rupam Bhaduri, Professor (Research and Acad.)** in the AI & Robotics Engineering Department and his research scholars, recently produced a publication (AY-2024-25) in a very prestigious **Quartile-1 (Q1)** Journal. Title: "Perovskite Solar Cell Stability Analysis Using Entropy-Based Support Vector Machine Learning", *Progress in Photovoltaics: Research and Applications*, DOI: 10.1002/pip.3861. Impact Factor: 8.0. **SCI, Scopus & WOS Indexed, Publisher: J. Wiley & Sons., USA & UK.**

The screenshot shows the Wiley Author Proof interface. At the top, it displays the article title "Perovskite Solar Cell Stability Analysis Using Entropy-Based Support Vector Machines Learning" and the author's name "Rupam Bhaduri" with a co-author "S. Marasa". The journal cover for "PHOTOVOLTAICS" is shown, along with its ISSN (1527-7995) and DOI (10.1002/pip.3861). A vertical timeline on the right indicates the publication process: Proof Initiated (11/02/24), Corresponding Author (due date 11/02/24, start date 11/02/24, end date 11/02/24), Proof Collator (due date 11/02/24, start date 11/02/24, end date 11/02/24), and Completed. The abstract text is visible at the bottom, starting with "Lead halide perovskites have demonstrated significant potential for photovoltaic (PV) applications over the past 10 years. Perovskite solar cells (PSCs) stability, however, continues to limit their commercialization, and the inability to compare previous stability data to assess possible directions for increasing device stability is caused by a lack of effectively established unified stability testing and disseminating standards. In this article, we suggest applying machine learning (ML) to improve the thermal, chemical, and structural stability of PSCs."



**Dr. Sivananda Reddy L**  
Associate Professor  
Department of CSE



**Dr. Naresh P**  
Assistant Professor  
Department of CSE

- Dr. Sivananda Reddy L, Associate Professor, and Dr. Naresh P, Assistant Professor, Department of CSE successfully participated in the Ten-day Workshop series on “From Scratch to Deployment: Hands-on Model Building with Keras and TensorFlow” a Neural network Workshop organized by the Department of CSE Sri Venkateshwara College of Engineering from 14th October to 25th October 2024.





**Dr. Kousalya Govardhanan**  
Professor  
Department of CSE

- Dr. Kousalya Govardhanan, Professor, Department of CSE & Dean R&D, has published a paper in the IEEE Internet of Things Journal with the title “VPSI 2.0: IoT-Based Hybrid Protocol with Simultaneous Equations for Real-Time Seizure Classification and False-Negative Mitigation” during 28th October 2024 with DOI:

Journals & Magazines > IEEE Internet of Things Journal > Early Access

### VPSI 2.0: IoT-Based Hybrid Protocol with Simultaneous Equations for Real-Time Seizure Classification and False-Negative Mitigation

Publisher: IEEE [Cite This](#) [PDF](#)

Karthikeyan Gopalakrishnan ; Arun Kumar Balakrishnan ; Kousalya Govardhanan ; Kandala NV P S Rajesh [All Authors](#)

[Abstract](#) [Authors](#) [Keywords](#)

**Abstract:**  
Non-epileptic seizures are a clinical symptom of abnormally high synchronous cortical activity known as psychogenic non-epileptic seizures (PNES) as they exhibit no outward signs of neurological damage. The need for differentiating PNES from full-body General Seizures (GTCS) decreases therapy time and ensures proper hospice. Internet-of-Medical-Things (IoMT) provide a closed-loop mechanism to accurately measure seizures. The erratic nature of seizures has drawn the attention where false detection could have catastrophic impact. The paper discusses the VPSI 2.0 (Vibration Profile Seizure Identifier) where vibration profile analysis of an ictal patient is measured in realtime to classify seizures in an IoMT framework. The novel seizure detection model has been proposed for differentiating between multiple seizure types. The Simultaneous Equation (S.E) protocol is developed for noninvasive stigma-free monitoring of seizures for continual monitoring. S.E based IoT seizure classifier is helpful to mitigate challenges present in detecting real-time occurrences of seizure by 95.683% in a controlled environment.

Published in: IEEE Internet of Things Journal ( Early Access )

Page(s): 1 - 1 **DOI:** [10.1109/JIOT.2024.3486991](https://doi.org/10.1109/JIOT.2024.3486991)

Date of Publication: 28 October 2024 **Publisher:** IEEE

ISSN Information:

**More Like This**

- Prototype of Home Monitoring Device Using Internet of Things and River Formation Dynamics-Based Multi-Hop Routing Protocol (RFDHM) IEEE Transactions on Consumer Electronics Published: 2019
- Decentralized Management Protocol for Wireless Sensor Network in Industrial Internet of Things 2024 International Ural Conference on Electrical Power Engineering (UralCon) Published: 2024

[Show More](#)



**Dr. Naresh P**  
**Assistant Professor**  
**Department of CSE**

- Dr. Naresh P, Assistant Professor, Department of CSE has successfully presented a paper titled “AI-Driven Forecasting Mechanism for Cardiovascular Diseases: A Hybrid Approach using MLP and K-NN Models” at the IEEE 2nd International Conference on Self Sustainable Artificial Intelligence Systems (ICSSAS 2024) held from 23-25 October 2024 at M.P. Nachimuthu M.Jaganathan Engineering College, Chennaimalai, Erode, India.



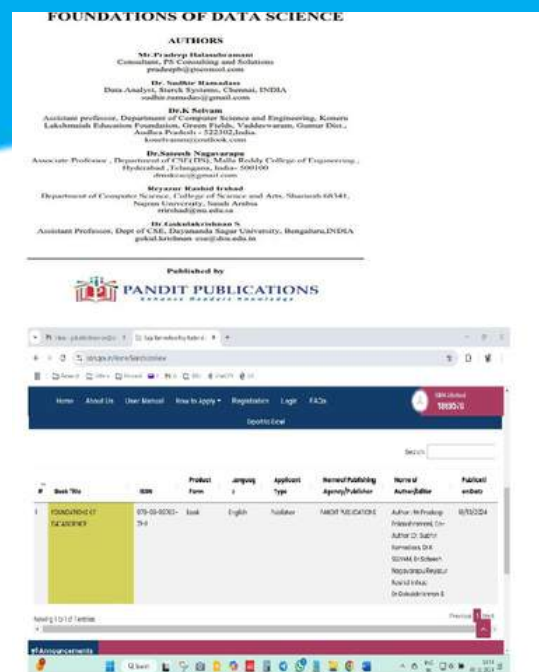
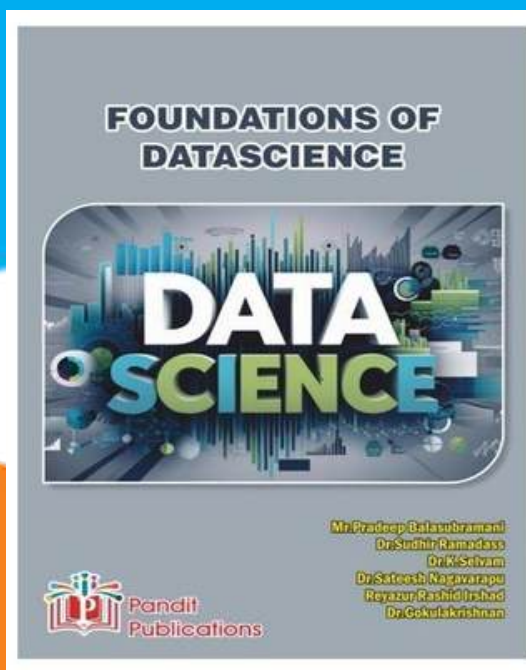
- Dr. Naresh P, Assistant Professor, Department of CSE successfully completed a free online course on “Free Datasets in Analytics” in November 2024 and also attended 5 days of online FDP on “Next-generation Technologies on information and communication” from 5th to 9th November 2024 organized by Bengal College of Engineering and Technology.





**Dr. Gokulakrishnan S**  
**Assistant Professor**  
**Department of CSE**

- Dr. S Gokulakrishnan, Assistant Professor, Department of CSE has successfully published a textbook as a Co-author for the book titled “Foundations of Data Science” with Pandit Publications and ISBN: 978-93-93769-71-8 during November 2024.



- Dr. S Gokulakrishnan, Assistant Professor, Department of CSE has successfully presented the paper titled "Distributed Self-Localization with Enhanced Optimization through Machine Learning for IoT Applications" at the 2024 Asian Conference on Communication and Networks (ASIANComNet), held from October 24–27, 2024, in Bangkok, Thailand. This conference is recognized under IEEE Conference ID 63184.

ASIAN CONFERENCE ON COMMUNICATION AND NETWORKS  
24-27 October 2024, Bangkok, Thailand

Report Details

Distributed Self-Localization with Improved Optimization with machine learning in IoT Applications

Report starts October 25, 2024 14:45 (Asia/Bangkok)

Report time 5 minutes

Version: PDF Poster Session (PDF Poster)

No file yet

Summary

The Internet of things (IoT) is one of the most trending technologies which is used to monitor a huge number of devices worldwide. Device localization and optimal path selection is very essential in this technology to maintain the communication standard of the devices. To reduce the delay and power utilization of the devices and to attend high efficiency these parameters are needed to get concentrated. For that in this article distributed self-localization with an improved optimization model is developed using machine learning (DSEIOM) algorithm. The core modules of this article are efficient data processing analysis and improved optimization algorithm. This system structure with the huge number of devices is simulated in the software called NS3 where a large number of devices are effectively monitored and properly localized. The parameters which are calculated to analyze the performance are delay success rate, network throughput, routing overhead, data loss rate and delay. From the result it is proven that this DSEIOM attends better performance than earlier works in terms of data success rate and the network throughput.

Keywords

Internet of Things (IoT), Machine learning, Improved Optimization Model and Distributed Self-Localization.

Reporter

Zahraa Hameed Jaber  
Master National University of Science and Technology

Author

Muhammed Haseeb - The Islamic University  
Zahraa Hameed Jaber - National University of Science and Technology  
Gokulakrishnan S - Draperwilde Lager University  
Hanaa Ali Alshaihani - Al-Mustaqbal University College  
Fatima Alshaykh - Al-Mustaqbal University  
Hussein Al-Aboudy - Mansoura University College

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## Distributed Self-Localization with Improved Optimization with Machine Learning in IoT Applications

Zahraa Hameed Jaber<sup>1</sup>, Muhammed Haseeb<sup>2</sup>, Gokulakrishnan S.<sup>3</sup>, Hanaa Ali Alshaihani<sup>4</sup>,  
Fatima H. Alshaykh<sup>5</sup> and Hussein Al-Aboudy<sup>6</sup>

<sup>1</sup>National University of Science and Technology, Dhi Qar, Iraq  
<sup>2</sup>Department of Computer Technical Engineering, College of Technical Engineering, The Islamic University, Najaf, Iraq  
<sup>3</sup>Department of Computer Science and Engineering, Dayananda Sagar University, Bengaluru, India  
<sup>4</sup>Department of Computer Science, Almoos University College, Najaf, Iraq  
<sup>5</sup>Medical Laboratories Techniques Department, Al-Mustaqbal University, Hillah, Iraq  
<sup>6</sup>Department of Computer Techniques Engineering, Mazaya University College, DhiQar, Iraq  
<sup>1</sup>zahraa.h.jaber@nust.edu.iq, <sup>2</sup>moh.mech89@iunajaf.edu.iq, <sup>3</sup>gokul.krishnan-cse@dsu.edu.in, <sup>4</sup>hanaa.ali.shaihani@almoos.edu.iq, <sup>5</sup>fatimahashim109@gmail.com, <sup>6</sup>huhraiz22@mpu.edu.iq

**Abstract**—The Internet of things (IoT) is one of the most trending technologies which is used to monitor a huge number of devices worldwide. Device localization and optimal path selection is very essential in this technology to maintain the communication standard of the devices. To reduce the delay and power utilization of the devices and to attend high efficiency these parameters are needed to get concentrated. For that in this article distributed self-localization with an improved optimization model is developed using machine learning (DSEIOM) algorithms. The core modules of this article are efficient data processing analysis and improved optimization algorithm. The parameters which are calculated to analyze the performance are data success rate, network throughput, routing overhead, data loss rate and delay. From the result it is proven that this DSEIOM attends better performance than earlier works in terms of data success rate and the network throughput.

**Index Terms**—IoT, DSEIOM, machine learning, improved optimization model, distributed self-localization

**I. INTRODUCTION**

In recent decades, Internet of Things (IoT) [1–4] is combined with wireless applications and it occupies maximum of the standards of intelligent communication system and as well it is also attracted by maximum of the academic and industrial researchers [5–8]. Currently a rich information source is essential to communicate between the smart IoT devices and there is a possibility of several malfunctions among the devices, which are present in the network [9–12]. Applications where these technologies are mainly concentrated are temperature [13–15], humidity, and the chemical components [16–19] and so on [20–23].

The current drawbacks in the wireless communication are improper device localization and ineffective path selection among the devices at the time of data transmission [24–28]. Due to these drawbacks, the network suffers from certain things like: high delay, high power utilization and the routing overhead [29–33]. It is very essential to reduce these parameters to attend maximum performance in wireless communication. To achieve that device localization and optimization need to get concentrated [34–37]. Through effective self-localization the congestion and delay can be reduced [38–40]. Through optimization process each device in the network selects optimal path to transfer the data to the destination and that reduces the power utilization of the devices and it increases the network throughput. For that purpose, in this article distributed self-localization with improved optimization using machine learning (ML) is concentrated. The core contribution of the article is listed as follows.

The subsection of the article includes data processing analysis and improved optimization algorithm. Through this process that delay and power utilization of the devices are reduced and that greatly increases the communication quality of the network.

**II. RELATED WORKS**

In [41], the authors work developed the Optimal Multilayer Perceptron (OMLP) with Dragonfly Algorithm (DA) for WSN intrusion detection, obtaining an accuracy and detection rate of 94.21% and 95.18%, accordingly, on the NSL\_KDDCup\_99 dataset, with the disadvantage of substantial packet loss. In [42], the authors described the widespread use of the IoT has transformed technology but raised security concerns in data communication. The disadvantages are high delay. In [43], the authors developed software-defined wireless sensor networks (SD-WSN) offer flexible network management with a centralized view using the SDN controller. We also propose a supervised ML approach to identify and mitigate adverse effects of erratic mobility in SD-WSN but the disadvantages are high packet loss. In [44], the authors demonstrated WSNs,

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- Dr. S Gokulakrishnan, Assistant Professor, Department of CSE has successfully completed an 8-week NPTEL Online Certification course on “Google Cloud Computing Foundations” with a 75% ELITE SILVER rating from August to October 2024.



**Elite**  
**NPTEL ONLINE CERTIFICATION**  
 (Funded by the MoE, Govt. of India)



This certificate is awarded to  
**GOKULAKRISHNAN S**  
 for successfully completing the course



**Google Cloud Computing Foundations**

with a consolidated score of **75** %

Online Assignments	23.38/25	Proctored Exam	51.78/75
--------------------	----------	----------------	----------

Total number of candidates certified in this course: **6940**

**Aug-Oct 2024**  
 (8 week course)

*Haimanti Banerji*  
**Prof. Haimanti Banerji**  
 Coordinator, NPTEL  
 IIT Kharagpur



Indian Institute of Technology Kharagpur



Roll No: NPTEL24CS131S652805086

To verify the certificate



No. of credits recommended: 2 or 3

- Dr. S Gokulakrishnan, Assistant Professor, Department of CSE has successfully completed a 12-week NPTEL Online Certification course on “Cloud Computing” with 88% ELITE SILVER rating in Topper 2% from July to October 2024.



**Elite**  
**NPTEL ONLINE CERTIFICATION**  
 (Funded by the MoE, Govt. of India)



This certificate is awarded to  
**GOKULAKRISHNAN S**  
 for successfully completing the course



**Cloud Computing**

with a consolidated score of **88** %

Online Assignments	25/25	Proctored Exam	63.33/75
--------------------	-------	----------------	----------

Total number of candidates certified in this course: **30816**

**Jul-Oct 2024**  
 (12 week course)



*Haimanti Banerji*  
**Prof. Haimanti Banerji**  
 Coordinator, NPTEL  
 IIT Kharagpur



Indian Institute of Technology Kharagpur



Roll No: NPTEL24CS118S1052802964

To verify the certificate

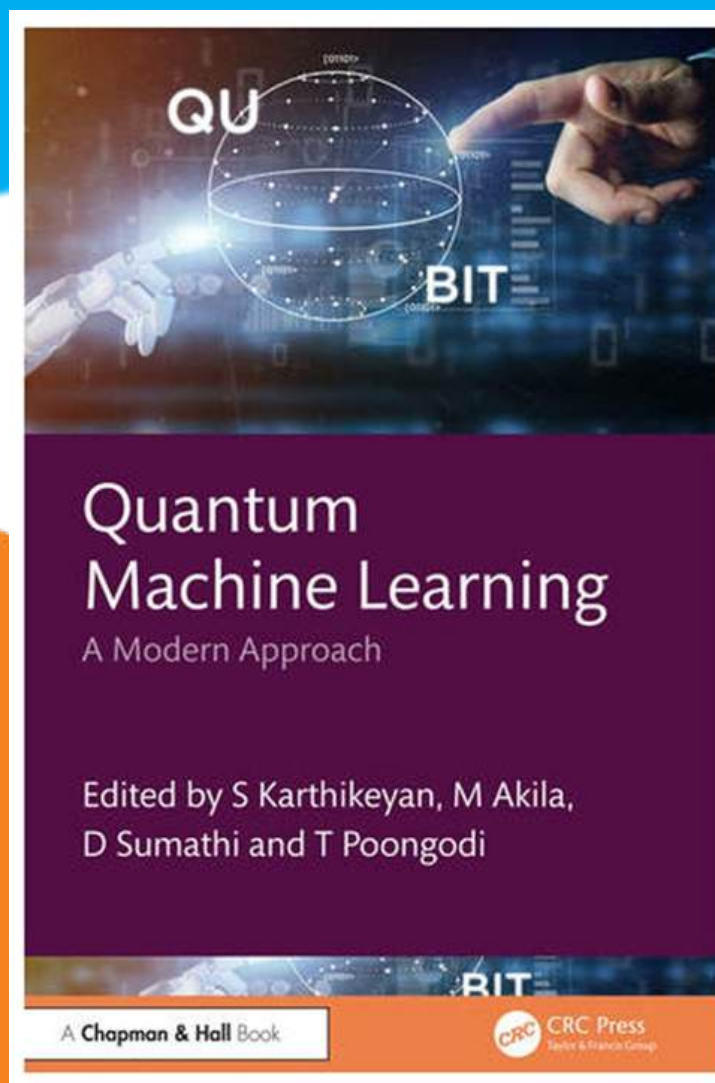


No. of credits recommended: 3 or 4



**Dr. Poongodi T**  
**Professor**  
**Department of CSE**

- Dr. T. Poongodi, Professor in the Department of CSE, published an Edited Book entitled “Quantum Machine Learning: A Modern Approach” with an International Publisher - CRC Press – Routledge Taylor & Francis Group — A Chapman & Hall Book, 2024, pp. 1–300.






**Dr. George Fernandez I**  
**Associate Professor**  
**Department of CSE**

- Dr George Fernandez I, Associate Professor, Department of CSE has received an AWS Academy Educator Badge from AWS Training and certification on 7th November 2024.

The screenshot shows a LinkedIn post. At the top left is the AWS Academy Educator badge. Below it, the text reads "AWS Academy Educator" and "Amazon Web Services Training and Certification", with "Issued 11/7/24" below that. The post is by "Dr George Fernandez I • You", an Associate Professor at Dayananda Sagar University, Bengaluru- India, posted 5m ago. The post content says "View my verified achievement from Amazon Web Services (AWS)." Below this is a card containing the AWS Academy Educator badge, the text "AWS Academy Educator was issued by Amazon Web Services Training and Certification to Dr George Fernandez I.", and the URL "credly.com".

- Dr George Fernandez I, Associate Professor, Dept of CSE has successfully attended the Bengaluru Tech Summit-BTS 2024 from 19th to 21st November 2024 at Bengaluru Palace as a delegate.

  
GOVERNMENT OF  
KARNATAKA  
Dept. of E, IT & Bt

  
**BENGALURU  
TECH SUMMIT**  
19TH - 21ST NOV. 2024 | BANGALORE PALACE  
ಬೆಂಗಳೂರು ಟೆಕ್ ಸಮ್ಮಿಟ್



**Dr. George Fernandez**

I am Attending BTS 2024 as a  
**Delegate**

  
**Unbound**  
BREAKING BOUNDARIES



- Dr George Fernandez I, Associate Professor, Department of CSE extending his service as Indian external examiner for the Ph.D. final Viva Voice examination of the research scholar Mr B Manikandan of the title “A Sentiment Aware Product Recommendation System Using Optimization Techniques and Deep Classifiers”, Under the Bharath University during November 2024.

**Bharath**  
**INSTITUTE OF HIGHER EDUCATION AND RESEARCH**  
(Declared as Deemed-to-be University under section 3 of UGC Act, 1956)

**Ph.D. VIVA NOTIFICATION**  
**FACULTY OF ENGINEERING**  
**DEPARTMENT OF COMPUTER SCIENCE ENGINEERING**

As per the regulation of Bharath Institute of Higher Education and Research, Chennai **B. MANIKANDAN (Reg.No.D19CS501)** will defend his Ph.D. Thesis at a Public Viva – Voce Examination.

**TITLE OF THE THESIS**

**A SENTIMENT AWARE PRODUCT RECOMMENDATION SYSTEM USING OPTIMIZATION TECHNIQUES AND DEEP CLASSIFIERS**

**Date & Time: 20. 11. 2024 - 10 .00 A.M.**

**VENUE: I Floor, BIHER, Chennai 600 073**

<p><b><u>External Examiner - I</u></b></p> <p><b>Dr George Fernandez I</b>  Associate Professor , Department of CSE  Dayananda Sagar University  Devarakagalahalli, Harohalli Kanakapura Road  Karnataka 562 112</p>	<p><b><u>External Examiner – II</u></b></p> <p><b>Dr. C. Lakshmi</b>  Professor &amp; Associate Chairperson  Dept. of Computational Intelligence  SRM Institute of Science &amp; Technology  Chennai</p>
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**Research Supervisor and Convener:**

**Dr. T. Krishnakumar**  
Professor , Department of CSE  
Bharath Institute of Higher Education & Research Chennai 600 073

A copy of the thesis is available in Central Library for reference. Faculty members research scholars and students are invited to attend the Viva-Voce examinations and take part discussion

Place : *Chennai*  
Date : *12-11-2024*

*Dr. George Fernandez I*  
Dean Research



*P. Krishnakumar*  
Convener

**Dr. T. KRISHNAKUMAR, M.Tech., Ph.D.,**  
Head-Strategy and Planning  
Bharath Institute of Higher Education & Research  
(Declared as Deemed to be University U/S 3 of UGC Act, 1956)  
Chennai-600 073, INDIA  
Email: drkk@bharathuniv.ac.in



**Dr. Bipin Kumar Rai**  
**Professor**  
**Department of CSE**

- Dr. Bipin Kumar Rai, Professor, Department of CSE has presented a paper titled “Leveraging 3D Faster R-CNN for 3D Dental X-ray Restoration and Treatment Identification” At the Computing and Machine Learning Conference (CML 2024) and published in the Springer Lecture Notes in Networks and Systems, vol 1108, Singapore during October 2024.

[https://doi.org/10.1007/978-981-97-6588-1\\_19](https://doi.org/10.1007/978-981-97-6588-1_19).

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Home > Computing and Machine Learning > Conference paper

### Leveraging 3D Faster R-CNN for 3D Dental X-ray Restoration and Treatment Identification

Conference paper | First Online: 23 October 2024  
pp.241–260 | Cite this conference paper

**Bipin Kumar Rai** ✉ **Deepanshu Bisht**, **Ekansh Kumar** & **Aashish Chaudhary**

Part of the book series: *Lecture Notes in Networks and Systems* (LNNS, volume 1108)

Included in the following conference series:  
*International Conference on Computing and Machine Learning*

71 Accesses

Access this chapter

Log in via an institution →

Chapter EUR 29.95  
Price includes VAT (India)

- Available as PDF
- Read on any device

- Dr. Bipin Kumar Rai, Associate Professor, Department of CSE has presented a paper titled “Heart Disease Prediction Model Using Machine Learning Technology”, at the International Conference of Computation of Artificial Intelligence and Machine Learning (ICCAIML-2024) and published in the Springer Communications in Computer and Information Science, vol 2184. Springer, during September 2024.  
[https://doi.org/10.1007/978-3-031-71481-8\\_23](https://doi.org/10.1007/978-3-031-71481-8_23).

## Heart Disease Prediction Model Using Machine Learning Techniques

Conference paper | First Online: 25 September 2024  
pp 290–301 | [Cite this conference paper](#)

Bipin Kumar Rai ✉, Aparna Iha, Shreyal Srivastava & Aman Bind

Part of the book series: [Communications in Computer and Information Science](#) ((CCIS, volume 2184))

Included in the following conference series:  
[International Conference on Computation of Artificial Intelligence & Machine Learning](#)

3 Accesses

### Abstract

In the present day, individuals often find themselves engrossed in their daily routines, focusing on work and various activities, while inadvertently neglecting their well-being. As a consequence of this demanding lifestyle and lack of attention to health, there is a rapid increase in the number of people falling ill. Furthermore, a substantial portion of the population is grappling with health issues, particularly heart disease. Cardiovascular diseases, claiming 17.9 million lives annually, rank as the foremost cause of death globally, as reported by the WHO. Hence early stage detection of cardiac disease through early-stage signs is a major need in today's world. A system that can aid in the early diagnosis of cardiac disease is suggested. This method aims to develop a ML model to detect cardiac disease in its early stages. The different ML algorithms such as RF, KNN, LR, DT and SVM are used to attain the maximum accuracy. UCI repositories dataset was used for performing the experiments. In this study the accuracy of 80.33% is obtained with SVM.

- Dr. Bipin Kumar Rai, Associate Professor, Department of CSE has presented a paper titled “Abstractive Text Summarization with Domain Knowledge for Biomedical Data”, at the International Conference of Computation of Artificial Intelligence and Machine Learning (ICCAIML-2024) and published in the Springer Communications in Computer and Information Science, vol 2185. Springer, during September 2024.

[https://link.springer.com/chapter/10.1007/978-3-031-71484-9\\_23](https://link.springer.com/chapter/10.1007/978-3-031-71484-9_23).

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Home > Computation of Artificial Intelligence and Machine Learning > Conference paper

## Abstractive Text Summarization with Domain Knowledge for Biomedical Data

Conference paper | First Online: 25 September 2024  
pp 259–271 | [Cite this conference paper](#)

**Computation of Artificial Intelligence and Machine Learning**  
(ICCAIML 2024)

Shivani Sharma ✉, Gaurav Agarwal & Bipin Kumar Rai

Part of the book series: [Communications in Computer and Information Science](#) ((CCIS, volume 2185))

Included in the following conference series:  
[International Conference on Computation of Artificial Intelligence & Machine Learning](#)

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Chapter EUR 29.95  
Price includes VAT (India)

Available as PDF



**Prof. Sasikala N**  
**Assistant Professor**  
**Department of CSE**

- Prof. Sasikala N, Assistant Professor, Dept of CSE has successfully completed 12 weeks NPTEL Online Certification course on "Applied Accelerated Artificial Intelligence", with 82% ELITE SILVER rating from July to October 2024.



## Elite

# NPTEL ONLINE CERTIFICATION

(Funded by the MoE, Govt. of India)

This certificate is awarded to

**SASIKALA N**


for successfully completing the course

**Applied Accelerated Artificial Intelligence**


with a consolidated score of **82 %**


Online Assignments	23.28/25	Proctored Exam	58.5/75
--------------------	----------	----------------	---------


Total number of candidates certified in this course: **635**

  
**Dr. Piyush P. Kurur**  
 Chairman, Centre for Continuing Education  
 IIT Palakkad


**Jul-Oct 2024**  
 (12 week course)

  
**Prof. Andrew Thangaraj**  
 NPTEL, Coordinator  
 IIT Madras

  
 Indian Institute of Technology Palakkad  
IIT PALAKKAD

  
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विद्यया ऋते, ज्ञाने मरेते

Roll No: NPTEL24CS104S652806280

To verify the certificate 

No. of credits recommended: 3 or 4



- Prof. Sasikala N, Assistant Professor, Dept of CSE has successfully completed 12 weeks NPTEL Online Certification course on "Introduction to Machine Learning", with 66% ELITE in July to October 2024.



**Elite**

## NPTEL ONLINE CERTIFICATION

(Funded by the MoE, Govt. of India)



**Skill India**  
कौशल भारत - कुशल भारत

This certificate is awarded to

**SASIKALA N**

for successfully completing the course



**Introduction to Machine Learning**

with a consolidated score of **66** %

Online Assignments	18.66/25	Proctored Exam	47.45/75
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Total number of candidates certified in this course: **4541**

**Prof. Andrew Thangaraj**  
Chair  
Centre for Outreach and Digital Education, IITM

**Jul-Oct 2024**

(12 week course)

**Prof. Vignesh Muthuvijayan**  
NPTEL Coordinator  
IIT Madras



Indian Institute of Technology Madras



Roll No: NPTEL24CS101S552806178

To verify the certificate



No. of credits recommended: 3 or 4



**Dr. Praveen Kulkarni**  
Associate Professor  
Department of CSE



**Dr. Rajesh T.M**  
Associate Professor  
Department of CSE



**Dr. Renuka Devi M.N**  
Assistant Professor  
Department of CSE

- Dr. Praveen V Kulkarni, Dr. Rajesh TM, Associate Professors, and Dr Renuka Devi M N, Assistant Professor, Department of CSE, have successfully presented the paper titled "Predicting cardiac disease using stacked refinement combination machine learning models" in 5th International Conference on Data Science, Computation and Security (IDSCS-24) Organised by the CHRIST(Deemed to be University), India in technical association with The Tejas Scientific Researcher Foundation, India from November 07-09, 2024.



**SPRINGER NATURE**

5<sup>th</sup> International Conference on Data Science,  
Computation and Security



**CERTIFICATE OF PRESENTATION**

Presented to

**Praveen V Kulkarni, Dayananda Sagar University, Bengaluru, India**

presented the paper titled **Predicting cardiac disease using stacked refinement combination machine learning models** authored by **Rajesh TM, Renuka Devi M N**

5<sup>th</sup> International Conference on Data Science, Computation and Security (**IDSCS-24**) Organised by the **CHRIST (Deemed to be University), India** in technical association with **The Tejas Scientific Researcher Foundation, India** from **November 07-09, 2024.**

Dr Samiksha Shukla  
Conference Chair, IDSCS'24

Mr Ajai Mishra  
Joint Secretary, TTSRF, India



Dr Fr Jossy P George  
Director, BGR Campus,  
Christ (Deemed to be University),  
Bangalore

IDSCS-2024\Presenter\065



**Prof. Benaka Santhosha S**  
Assistant Professor  
Department of CSE

- Prof. Benaka Santhosh, Assistant Professor, Dept of CSE has successfully completed 12 weeks NPTEL Online Certification course on " Digital Image Processing", with 77% ELITE SILVER rating in July to October 2024

**Elite**

**NPTEL ONLINE CERTIFICATION**  
(Funded by the MoE, Govt. of India)

This certificate is awarded to  
**BENAKA SANTHOSHA S**  
for successfully completing the course  
**Digital Image Processing**  
with a consolidated score of **77** %


Online Assignments	23.69/25	Proctored Exam	53.57/75
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Total number of candidates certified in this course: **3396**

**Jul-Oct 2024**  
(12 week course)

Indian Institute of Technology Kharagpur

Prof. Haimanti Banerji  
Coordinator, NPTEL  
IIT Kharagpur

Roll No: NPTEL24EE133S1052801994      To verify the certificate       No. of credits recommended: 3 or 4





**Dr. Revathi V**  
**Associate Professor**  
**Department of CSE**

- Dr. Revathi V, Associate Professor, Dept of CSE has successfully published a Book chapter in the Elsevier Journal “Advances in Intelligent Energy Systems”, with the Book titled “Green Machine Learning and Big Data for Smart Grids Practices and Applications” with the title of the chapter is “Paradigm shift from machine learning to Federated learning” during November 2024.

18:46 70%

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Green Machine Learning and  
Big Data for Smart Grids  
Practices and Applications  
Advances in Intelligent Energy Systems  
2025, Pages 133-146

**Chapter 9 - Paradigm  
shift from machine  
learning to federated  
learning**

Revathi Vaithiyathanan<sup>1</sup>, Ranjini K.<sup>2</sup>

<sup>1</sup> Department of CSE, Dayananda Sagar  
University, Bengaluru, Karnataka, India

<sup>2</sup> Department of CSE, CMR Institute of  
Technology, Bengaluru, Karnataka, India



**Dr. Dharmendra D P**  
**Assistant Professor**  
**Department of CSE**

- Prof. Dharmendra D P Assistant Professor, Dept of CSE has successfully completed 12 weeks NPTEL Online Certification course on " Digital Image Processing", with 68% in July to October 2024.

**Elite**

**NPTEL ONLINE CERTIFICATION**  
(Funded by the MoE, Govt. of India)

This certificate is awarded to  
**DHARMENDRA D P**  
for successfully completing the course  
**Digital Image Processing**  
with a consolidated score of **68** %

Online Assignments	24/25	Proctored Exam	43.5/75
--------------------	-------	----------------	---------

Total number of candidates certified in this course: **3396**

**Jul-Oct 2024**  
(12 week course)

**Prof. Haimanti Banerji**  
Coordinator, NPTEL  
IIT Kharagpur

Indian Institute of Technology Kharagpur

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Roll No: NPTEL24EE133S951500148      To verify the certificate      No. of credits recommended: 3 or 4



**Dr. Rajesh T.M**  
**Associate Professor**  
**Department of CSE**

- Dr. Rajesh T M, Associate Professor, and Prof Shankramma S Dhavalagimath, Research Scholar, Dept of CSE, Received the Best Paper Award in the Image Processing and Computer Vision category for the paper titled “Improving Image Restoration with a Hybrid Inverse and Median Filtering Approach” during 5th Congress on Intelligent Systems (CIS 2024) organized by the Department of CSE, CHRIST (Deemed to be University), Bengaluru, during November 2024.





**Prof. Arpita Paria**  
**Assistant Professor**  
**Department of CSE**

- Prof. Arpita Paria, Assistant Professor, Department of CSE, successfully participated in the Digital CoE Data Science Faculty development program between 24th June to 6th September 2024 from NTT Data Talent Development.



- Prof. Arpita Paria, Assistant Professor, Department of CSE, successfully completed a 12-week NPTEL Online Certification course on " Operating System Fundamentals", with 62% from July to October 2024.



## Elite

# NPTEL ONLINE CERTIFICATION

(Funded by the MoE, Govt. of India)

This certificate is awarded to

**ARPITA PARIA**

for successfully completing the course

**Operating System Fundamentals**

with a consolidated score of **62** %

Online Assignments	24/25	Proctored Exam	37.5/75
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Total number of candidates certified in this course: 2487

**Jul-Oct 2024**  
(12 week course)





**Prof. Haimanti Banerji**  
Coordinator, NPTEL  
IIT Kharagpur



Indian Institute of Technology Kharagpur



Roll No: NPTEL24CS108S552802508      To verify the certificate       No. of credits recommended: 3 or 4



**Prof. Bharath M B**  
Assistant Professor  
Department of CSE

- Prof. Bharath M B, Assistant Professor, Dept of CSE has successfully completed 12 weeks NPTEL Online Certification course on " Machine Learning and Deep Learning- Fundamentals and Applications", with 55% in July to October 2024.



## NPTEL ONLINE CERTIFICATION

(Funded by the MoE, Govt. of India)



This certificate is awarded to

**BHARATH M B**

for successfully completing the course

**Machine Learning and Deep Learning - Fundamentals  
and Applications**

with a consolidated score of **55** %

Online Assignments	20.88/25	Proctored Exam	33.75/75
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Total number of candidates certified in this course: **1767**



**Jul-Oct 2024**

(12 week course)

**Prof. T. V. Bharat**  
Head, Centre for Educational Technology  
NPTEL Coordinator, IIT Guwahati



Indian Institute of Technology Guwahati



Roll No: NPTEL24EE146S1052804946

To verify the certificate



No. of credits recommended: 3 or 4



**Prof. Naitik ST**  
Assistant Professor  
Department of CSE

- Prof. Naitik ST, Assistant Professor, Dept of CSE has successfully completed a 12-week NPTEL Online Certification course on " Practical Cyber Security for Cyber Security Practitioners", with 72% in July to October 2024.

**Elite**

**NPTEL ONLINE CERTIFICATION**  
(Funded by the MoE, Govt. of India)

This certificate is awarded to  
**NAITIK ST**  
for successfully completing the course  
**Practical Cyber Security for Cyber  
Security Practitioners**  
with a consolidated score of **72** %

Online Assignments	24.38/25	Proctored Exam	48/75
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Total number of candidates certified in this course: 1625

Jul-Oct 2024  
(12 week course)

Indian Institute of Technology Kanpur

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Roll No: NPTEL24CS85S452806968      To verify the certificate       No. of credits recommended: 3 or 4

- Prof. Naitik ST, Assistant Professor, Department of CSE has successfully published a Journal paper in Scopus indexed Q3 paper with the title “Design and Development of Multimodal Biometric System Using Finger Veins and Iris by CNN Integrated with Hybrid SIO and Whale Optimization Techniques”, in the journal, International Journal of Interactive Mobile Technologies and the publisher is International Federation of Engineering Education Societies (IFEES) during November 2024. <https://doi.org/10.3991/ijim.v18i22.50865>.

The screenshot shows the journal's homepage for the paper. The title is "Design and Development of Multimodal Biometric System Using Finger Veins and Iris by CNN Integrated with Hybrid SIO and Whale Optimization Techniques". The authors listed are Naitik S.T. (Department of CSE, Dayananda Sagar University, Bengaluru, Karnataka, India) and J. V. Gorabal (Department of CSE, Research Center – ATME College of Engineering, Mysore, Karnataka, India). The journal is ranked Q3 in the Computer Networks and Communications category, and has an SJR 2023 score of 0.4. The issue is dated 22.2024.



**Prof. Roshan Sanu Y**  
**Assistant Professor**  
**Department of CSE**

- Prof. Roshan Sanu Y, Assistant Professor, Dept of CSE has successfully completed 12 weeks NPTEL Online Certification course on "Cyber Security and Privacy", with 54% in July to October 2024, and also another Course “HR Analytics” with 84% ELITE SILVER rating in July to October 2024



**Elite**  
**NPTEL ONLINE CERTIFICATION**  
 (Funded by the MoE, Govt. of India)



This certificate is awarded to  
**ROSHAN SANU Y**  
 for successfully completing the course



**HR Analytics**

with a consolidated score of **84** %

Online Assignments	24.69/25	Proctored Exam	59.25/75
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Total number of candidates certified in this course: **2298**

**Prof. Kaushik Ghosh,**  
 Professor (Chemistry)  
 Coordinator CEC

**Jul-Oct 2024**  
 (12 week course)

**Prof. Ranjana Pathania,**  
 Professor (BSBE)  
 Coordinator (NPTEL)



Indian Institute of Technology Roorkee



Roll No: NPTEL24HS126S752804860

To verify the certificate



No. of credits recommended: 3 or 4



**NPTEL ONLINE CERTIFICATION**  
 (Funded by the MoE, Govt. of India)



This certificate is awarded to  
**ROSHAN SANU Y**  
 for successfully completing the course



**Cyber Security and Privacy**

with a consolidated score of **54** %

Online Assignments	22.19/25	Proctored Exam	32.15/75
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Total number of candidates certified in this course: **6461**

**Prof. Andrew Thangaraj**  
 Chair  
 Centre for Outreach and Digital Education, IITM

**Jul-Oct 2024**  
 (12 week course)

**Prof. Vignesh Muthuvijayan**  
 NPTEL Coordinator  
 IIT Madras



Indian Institute of Technology Madras



Roll No: NPTEL24CS121S952800296

To verify the certificate



No. of credits recommended: 3 or 4



**Prof. Vishwas D B**  
Assistant Professor  
Department of CSE

- Prof. Vishwas D B, Assistant Professor, Dept of CSE has successfully completed a 12-week NPTEL Online Certification course on "Introduction to Internet of Things", with 79% ELITE SILVER rating from July to October 2024.

**Elite**

**NPTEL ONLINE CERTIFICATION**  
(Funded by the MoE, Govt. of India)

This certificate is awarded to  
**VISHWAS D B**  
for successfully completing the course  
**Introduction to Internet of Things**  
with a consolidated score of **79** %

Online Assignments	24.78/25	Proctored Exam	54/75
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Total number of candidates certified in this course: **33131**

**Jul-Oct 2024**  
(12 week course)

**Prof. Haimanti Banerji**  
Coordinator, NPTEL  
IIT Kharagpur

Indian Institute of Technology Kharagpur

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India ke liye, Jeevan ke liye

Roll No: NPTEL24CS115S752804424      To verify the certificate      No. of credits recommended: 3 or 4



**Dr. Mouleeswaran S K**  
Associate Professor  
Department of CSE

- Dr. Mouleeswaran S K, Associate Professor, Dept of CSE has successfully completed a 12-week NPTEL Online Certification course on " Introduction to Industry 4.0 and Industrial Internet of Things", with 78% ELITE SILVER rating from July to October 2024.



## Elite

# NPTEL ONLINE CERTIFICATION

(Funded by the MoE, Govt. of India)

This certificate is awarded to  
**DR MOULEESWARAN SK**  
for successfully completing the course  
**Introduction to Industry 4.0 and Industrial  
Internet of Things**  
with a consolidated score of **78** %

Online Assignments	23.94/25	Proctored Exam	54/75
--------------------	----------	----------------	-------

Total number of candidates certified in this course: 15725

**Jul-Oct 2024**  
(12 week course)



**Prof. Haimanti Banerji**  
Coordinator, NPTEL  
IIT Kharagpur



Indian Institute of Technology Kharagpur



Roll No: NPTEL24CS95S352401586      To verify the certificate       No. of credits recommended: 3 or 4



**Dr. Gousia Thahniyath**  
Assistant Professor  
Department of CSE

- Dr. Gousia Thahniyath, Assistant Professor, Dept of CSE has successfully completed 12 weeks NPTEL Online Certification course on "Machine Learning and Deep Learning - Fundamentals and Applications", with 76% ELITE SILVER rating and Topper in the Top 2% July to October 2024.

**Elite**

**NPTEL ONLINE CERTIFICATION**  
(Funded by the MoE, Govt. of India)

This certificate is awarded to  
**GOUSIA THAHNIYATH**  
for successfully completing the course  
**Machine Learning and Deep Learning - Fundamentals  
and Applications**  
with a consolidated score of **76** %

Online Assignments	22/25	Proctored Exam	54/75
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Total number of candidates certified in this course: **1767**

**Jul-Oct 2024**  
(12 week course)

Indian Institute of Technology Guwahati

Prof. T. V. Bharat  
Head, Centre for Educational Technology  
NPTEL Coordinator, IIT Guwahati

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INDIAN INSTITUTE OF TECHNOLOGY GUWAHATI

Roll No: NPTEL24EE146S1052801145      To verify the certificate       No. of credits recommended: 3 or 4



**Dr. Sridhar S K**  
Associate Professor  
Department of CSE

- Dr. Sridhar S K, Associate Professor, Dept of CSE has successfully completed 12 weeks NPTEL Online Certification course on “Operating System Fundamentals”, with 72% from July to October 2024.



**Elite**

**NPTEL ONLINE CERTIFICATION**  
(Funded by the MoE, Govt. of India)



Skill India  
शौशल भारत - कुशल भारत

This certificate is awarded to  
**SRIDHAR S K**  
for successfully completing the course  
**Operating System Fundamentals**

with a consolidated score of **72** %

Online Assignments	22.69/25	Proctored Exam	49.5/75
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Total number of candidates certified in this course: **2487**

**Jul-Oct 2024**  
(12 week course)



**Prof. Haimanti Banerji**  
Coordinator, NPTEL  
IIT Kharagpur



Indian Institute of Technology Kharagpur



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शुद्ध शिक्षण, उच्च शिक्षण

Roll No: NPTEL24CS108S552800593      To verify the certificate       No. of credits recommended: 3 or 4



**Dr. Savitha Hiremath**  
Associate Professor  
Department of CSE

- Dr. Savitha Hiremath, Associate Professor, Dept of CSE has successfully completed a 12-week NPTEL Online Certification course on "Operating System Fundamentals", with an 83% ELITE SILVER rating in the Top 1% from July to October 2024.

**Elite**

**NPTEL ONLINE CERTIFICATION**  
(Funded by the MoE, Govt. of India)

This certificate is awarded to  
**DR SAVITHA HIREMATH**  
for successfully completing the course

**Operating System Fundamentals**

with a consolidated score of **83** %

Online Assignments	23.06/25	Proctored Exam	60/75
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Total number of candidates certified in this course: **2487**

**Jul-Oct 2024**  
(12 week course)

Indian Institute of Technology Kharagpur

Prof. Haimanti Banerji  
Coordinator, NPTEL  
IIT Kharagpur

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विद्यया षण्णः, ज्ञानं मरणं

Roll No: NPTEL24CS108S552802794      To verify the certificate       No. of credits recommended: 3 or 4



**Dr. Basavaraj N Hiremath**  
Associate Professor  
Department of CSE

- Dr. Basavaraj N Hiremath, Associate Professor, Dept of CSE has successfully completed a 12-week NPTEL Online Certification course on "Operating System Fundamentals", with 58% from July to October 2024.



## NPTEL ONLINE CERTIFICATION

(Funded by the MoE, Govt. of India)



This certificate is awarded to  
**BASAVARAJ N HIREMATH**  
for successfully completing the course



**Operating System Fundamentals**

with a consolidated score of **58** %

Online Assignments	22.13/25	Proctored Exam	36/75
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Total number of candidates certified in this course: **2487**

**Jul-Oct 2024**  
(12 week course)

**Prof. Haimanti Banerji**  
Coordinator, NPTEL  
IIT Kharagpur



Indian Institute of Technology Kharagpur



Roll No: NPTEL24CS108S552806241

To verify the certificate



No. of credits recommended: 3 or 4



**Dr. Bondu Venkateswarlu**  
Associate Professor  
Department of CSE

- Dr. Bondu Venkateswarlu, Associate Professor, Dept of CSE has successfully completed 12 weeks NPTEL Online Certification course on "Operating System Fundamentals", with 65% during July to October 2024

**Elite**

**NPTEL ONLINE CERTIFICATION**  
(Funded by the MoE, Govt. of India)

This certificate is awarded to  
**BONDU VENKATESWARLU**  
for successfully completing the course

**Operating System Fundamentals**

with a consolidated score of **65** %

Online Assignments	18.03/25	Proctored Exam	46.5/75
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Total number of candidates certified in this course: **2487**

**Jul-Oct 2024**  
(12 week course)

**Prof. Haimanti Banerji**  
Coordinator, NPTEL  
IIT Kharagpur

Indian Institute of Technology Kharagpur

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एनपीटीएल

Roll No: NPTEL24CS108S552805898      To verify the certificate      No. of credits recommended: 3 or 4



**Dr. Renuka Devi M.N**  
Assistant Professor  
Department of CSE

- Dr. Renuka Devi M N, Assistant Professor, Department of CSE, has successfully completed a 12-week NPTEL Online Certification course on "Digital Image Processing", with 57% from July to October 2024.



## NPTEL ONLINE CERTIFICATION

(Funded by the MoE, Govt. of India)



This certificate is awarded to  
**RENUKADEVI M N**  
for successfully completing the course



### Digital Image Processing

with a consolidated score of **57** %

Online Assignments	18.38/25	Proctored Exam	39/75
--------------------	----------	----------------	-------

Total number of candidates certified in this course: **3396**

**Jul-Oct 2024**  
(12 week course)

**Prof. Haimanti Banerji**  
Coordinator, NPTEL  
IIT Kharagpur



Indian Institute of Technology Kharagpur



Roll No: NPTEL24EE133S952803859

To verify the certificate



No. of credits recommended: 3 or 4



**Prof. Navya Damodar**  
Assistant Professor  
Department of CSE

- Prof. Navya Damodar, Assistant Professor, Dept of CSE has successfully completed a 12-week NPTEL Online Certification course on " Machine Learning and Deep Learning - Fundamentals and Applications", with 69% ELITE Rating from July to October 2024.

**Elite**

**NPTEL ONLINE CERTIFICATION**  
(Funded by the MoE, Govt. of India)

This certificate is awarded to  
**NAVYA DAMODAR**  
for successfully completing the course  
**Machine Learning and Deep Learning - Fundamentals  
and Applications**

with a consolidated score of **69** %

Online Assignments	22.81/25	Proctored Exam	46.4/75
--------------------	----------	----------------	---------

Total number of candidates certified in this course: **1767**

**Jul-Oct 2024**  
(12 week course)

**Prof. T. V. Bharat**  
Head, Centre for Educational Technology  
NPTEL Coordinator, IIT Guwahati

Indian Institute of Technology Guwahati

**swayam**  
FREE ONLINE EDUCATION  
Tinkariya Bharat, Jigyasa Bharat

Roll No: NPTEL24EE146S952800093      To verify the certificate      No. of credits recommended: 3 or 4



**Prof. Kavyashree I Pattan**  
Assistant Professor  
Department of CSE

- Prof. Kavyashree I Pattan, Assistant Professor, Dept of CSE has successfully completed 12 weeks NPTEL Online Certification course on " Machine Learning and Deep Learning - Fundamentals and Applications", with 62% ELITE Rating from July to October 2024 and she also completed 100% of the self-paced training course on MATLAB Onramp by MathWorks Training Services on 14th November 2024.



Course Completion Certificate

Kavyashree Pattan

has successfully completed **100%** of the self-paced training course

MATLAB Onramp

14 November 2024

**Elite**  
**NPTEL ONLINE CERTIFICATION**  
(Funded by the MoE, Govt. of India)

This certificate is awarded to  
**KAVYASHREE I PATTAN**  
for successfully completing the course  
**Machine Learning and Deep Learning - Fundamentals  
and Applications**  
with a consolidated score of **62** %

Online Assignments	23.41/25	Proctored Exam	38.25/75
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Total number of candidates certified in this course: 1767

Jul-Oct 2024  
(12 week course)

Indian Institute of Technology Guwahati

Skill India  
असम-संस्कृत-संस्कृत

Prof. T. V. Bharati  
Head, Centre for Educational Technology  
NPTEL, Guwahati, IT Guwahati

swayam

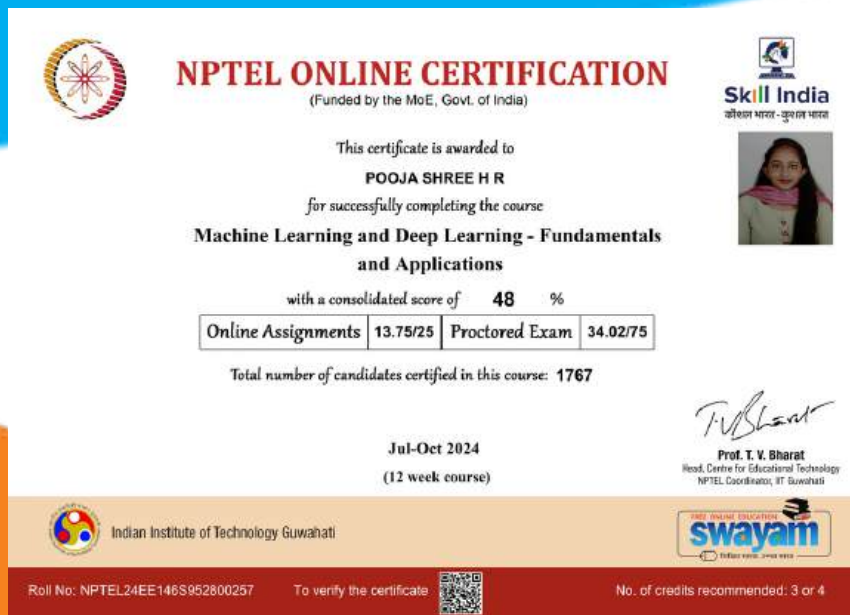
Roll No: NPTEL24EE14551052804560 To verify the certificate

No. of credits recommended: 3 or 4



**Prof. Pooja Shree H R**  
Assistant Professor  
Department of CSE

- Prof. Pooja Shree H R, Assistant Professor, Dept of CSE has successfully completed a 12-week NPTEL Online Certification course on " Machine Learning and Deep Learning - Fundamentals and Applications", with 48% in July to October 2024.



**NPTEL ONLINE CERTIFICATION**  
(Funded by the MoE, Govt. of India)

This certificate is awarded to  
**POOJA SHREE H R**  
for successfully completing the course  
**Machine Learning and Deep Learning - Fundamentals  
and Applications**  
with a consolidated score of **48** %

Online Assignments	13.75/25	Proctored Exam	34.02/75
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Total number of candidates certified in this course: **1767**

Jul-Oct 2024  
(12 week course)

Indian Institute of Technology Guwahati

Prof. T. V. Bharat  
Head, Centre for Educational Technology  
NPTEL Coordinator, IIT Guwahati

swayam

Roll No: NPTEL24EE146S962800257 To verify the certificate  No. of credits recommended: 3 or 4



**Prof. Suvika K V**  
Assistant Professor  
Department of CSE



**Prof. Mala B A**  
Assistant Professor  
Department of CSE

- Prof Suvika K V and Prof Mala B A, Assistant Professors published a paper in the Scopus indexed Journal with the title “A Survey on Application of Analytics in Legal Profession” in the Journal GRENZE International Journal of Engineering and Technology during November 2024.

The screenshot shows the website for GRENZE Scientific Society. The navigation menu includes Home, About Us, Journals, Conferences, Indexing, Digital Library, Search, and Contact Us. The main content area displays the article details for "A Survey on Application of Analytics in Legal Profession".

**Journal:** GRENZE International Journal of Engineering and Technology  
**Authors:** Suvika K V, Mala B A, Lavanya K, Lakshmi Sravani Grande  
**Volume:** 10 **Issue:** 2  
**Grenze ID:** 01.GIJET.10.2.788 **Pages:** 6427-6430

**Abstract**  
 The advancements made in different areas using machine learning, computation, artificial intelligence for the betterment of functionalities is increasing day-by-day. The research topics like Siri, Alexa are now just a commercially available equipments. The application of technology in legal profession is a diligent step as it depends on past cases, judgements, articles, sections etc. According to the released data from the Supreme court and National Judicial data grid, 3.9 crore cases are pending district and session courts, around 59 lakhs cases are pending in the various high courts. There are many people who are suffering emotionally and financially as they are completely dependent on advocate's advice which is taking a long time. This paper discusses various methods to improve the services given to the citizens from advocates and also changes the way of practicing legal profession.

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**GIJET**

**TITLE:**  
GRENZE International Journal of Engineering and Technology

**EDITOR IN CHIEF:**  
Dr. Janahanlal Stephen (Professor, Computer Science & Engg. Dept, Viswajyothi College of Engineering & Technology, Affiliated to KTU University, Kerala, S.India.)

**ISSN:**  
2395-5295(Online); 2395-5287(Print)

**FREQUENCY:**  
Twice Yearly

**ASSOCIATED PUBLISHER:**  
GRENZE

**RELATED SUBJECTS:**  
Computer Science & Engineering, Electrical & Electronics Engineering, Mechanical Engineering, Civil Engineering



**Dr. Meenakshi Malhotra**  
Associate Professor  
Department of CSE

- Dr. Meenakshi Malhotra, Associate Professor, Dept of CSE has successfully completed a 12-week NPTEL Online Certification course on “Data Structures and Algorithms using Java”, with 77% ELITE SILVER rating from July to October 2024.

**Elite**

**NPTEL ONLINE CERTIFICATION**  
(Funded by the MoE, Govt. of India)

This certificate is awarded to  
**DR MEENAKSHI MALHOTRA**  
for successfully completing the course

**Data Structure and Algorithms using Java**

with a consolidated score of **77** %

Online Assignments	23.25/25	Proctored Exam	54/75
--------------------	----------	----------------	-------

Total number of candidates certified in this course: **5081**

**Jul-Oct 2024**  
(12 week course)

**Prof. Haimanti Banerji**  
Coordinator, NPTEL  
IIT Kharagpur

Indian Institute of Technology Kharagpur

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Roll No: NPTEL24CS96S352804114      To verify the certificate      No. of credits recommended: 3 or 4



**Prof. Santhosh M**  
Assistant Professor  
Department of CSE

- Prof. Santhosh M, Assistant Professor, Dept of CSE has successfully completed a 12-week NPTEL Online Certification course on " Data Structures and Algorithms using Java ", with 60% ELITE from July to October 2024

**Elite**

**NPTEL ONLINE CERTIFICATION**  
(Funded by the MoE, Govt. of India)

This certificate is awarded to  
**SANTHOSH M**  
for successfully completing the course

**Data Structure and Algorithms using Java**

with a consolidated score of **60** %

Online Assignments	24.06/25	Proctored Exam	36/75
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Total number of candidates certified in this course: **5081**

**Jul-Oct 2024**  
(12 week course)

**Prof. Haimanti Banerji**  
Coordinator, NPTEL  
IIT Kharagpur

Indian Institute of Technology Kharagpur

**swayam**  
FREE ONLINE EDUCATION  
एनपीटीईल एजुकेशन, ३१००२६ खरगपुर

Roll No: NPTEL24CS96S451500782      To verify the certificate      No. of credits recommended: 3 or 4



**Dr. George Fernandez I**  
Associate Professor  
Department of CSE



**Dr. Arunkumar Gopu**  
Associate Professor  
Department of CSE



**Dr. Poongodi T**  
Professor  
Department of CSE

- Dr. George Fernandez I, Dr. Arun Kumar Gopu, Associate Professors, and Dr. T Poongodi, Professor, Department of CSE have published a journal research article titled "Conditional Random Field-Based Incremental Auto Scaling Algorithm to Enhance Workflow Scheduling in Cloud Computing", in IEEE Access. The journal has a high impact factor of 3.4. Indexed in Web of Science with Q1 Journal, Volume: 12, On Page(s): 173914-173924. Digital Object Identifier: 10.1109/ACCESS.2024.3502538. Link to access: <https://ieeexplore.ieee.org/document/10757417>.

**IEEE Access**  
Multimedia, Systems, Applications

Received 11 September 2024, accepted 15 November 2024, date of publication 19 November 2024,  
date of current version 29 November 2024.  
Digital Object Identifier: 10.1109/ACCESS.2024.3502538

**RESEARCH ARTICLE**

**Conditional Random Field-Based Incremental Auto Scaling Algorithm to Enhance Workflow Scheduling in Cloud Computing**

**GEORGE FERNANDEZ<sup>1</sup>, ARUNKUMAR GOPU<sup>2</sup>, S. P. ABIRAMI<sup>2</sup>, B. MISHA CHANDAR<sup>3</sup>, T. POONGODI<sup>1</sup>, (Senior Member, IEEE), AND B. ARUNKUMAR<sup>2,3</sup>**

<sup>1</sup>Department of Computer Science and Engineering, Durgam Cheruvu Engineering College, Bangalore, Karnataka 560076, India.  
<sup>2</sup>Department of Computer Science and Engineering, Chaitanya Institute of Technology, Chaitanya 681124, India.  
<sup>3</sup>School of Computer Science and Engineering, VIT-AP University, Amaravati, Andhra Pradesh 522237, India.  
Corresponding author: B. Arunkumar (arunkumar.b@vitap.ac.in)

**ABSTRACT** Current internet environment has demanded the need for cloud computing technology in handling large information. The paper's central theme is to evaluate the effectiveness of resources in managing scientific processes in a cloud environment by scheduling, capacity planning, and auto-scaling. Current systems have been linked with high costs because of disturbance of the flow, unsuccessful jobs, inability to meet certain cutoff times and long make span times. Therefore, to overcome these challenges, this research presents the Conditional Random Field-based Incremental Auto-scaling algorithm (CRF-IASA) to improve the cloud efficiency. The CRF-IASA uniquely leverages CRF's ability to model complex dependencies and interrelationships in resource management. Unlike traditional methods, which often rely on static or heuristic-based decision-making, CRF-IASA dynamically adapts to workload changes by effectively balancing data, memory, and CPU demands. The evaluation of the CRF-IASA is done with a help of the following sample workflows: A Cybershake 1000, Montage 1000, LIGO 1000 and Epigenome 997. Thus, according to the values obtained in the experiment, it is proved that the proposed auto-scaling algorithm is effective with the identified evaluation criteria: This is the total time needed to complete all activities, the energy used in the computing process, the costs incurred, and the rate at which the activities are completed in a schedule. Therefore, the study demonstrates the potential of utilizing CRF-IASA to obtain increased results concerning cloud performance and resource's consumption with less costs in a more adaptable way.

**INDEX TERMS** Cloud computing, resource scheduling methods, autoscaling algorithm, scientific applications, workflow application methods, resource utilization.

**1. INTRODUCTION**  
Cloud computing has grown into a global phenomenon rare before and becomes one of the essential tools for data processing. With the help of this revolutionary concept, there is a reliable system for transferring information and managing collective tasks in an efficient manner. Review of CSPs reveals that they have a central position in this context and mediate the usage of resource/releasing of resources via interaction with the relevant resource management portals. With innovation clearly defined as the cornerstone of CSPs, CSPs are known to implement new methods and new algorithms, to make services dependable and versatile in mixed cloud environments. Thus, in the sphere of cloud computing, both resource scheduling, allocation and conducting auto-scaling algorithms have become critically important because handlers evolve really fast and data volumes grow exponentially [1]. Resource management with cloud providers entails the use of available user interfaces by many users. The consumers, on the other hand, use these resource management services in order to regulate resources and software applications, where the service selection depends on the quality standards in terms of security and stability. One of the fundamental and distinctive features of

The associate editor coordinating the review of this manuscript and approving it for publication was Anjad Mithrasood.

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**Dr. T Gayathri**  
Assistant Professor  
Department of CSE

- Dr. T Gayathri, Assistant Professor, Department of CSE has successfully completed a 12-week NPTEL Online Certification course on “Cloud Computing” with 62% ELITE from July to October 2024.



**Elite**  
**NPTEL ONLINE CERTIFICATION**

(Funded by the MoE, Govt. of India)



This certificate is awarded to

**T GAYATHRI**

for successfully completing the course

**Cloud Computing**

with a consolidated score of **62** %

Online Assignments	24.22/25	Proctored Exam	38.06/75
--------------------	----------	----------------	----------

Total number of candidates certified in this course: **30816**



**Jul-Oct 2024**

(12 week course)

**Prof. Haimanti Banerji**  
Coordinator, NPTEL  
IIT Kharagpur



Indian Institute of Technology Kharagpur



Roll No: NPTEL24CS118S1052802932

To verify the certificate




No. of credits recommended: 3 or 4



**Prof. Gaurav Kumar**  
Assistant Professor  
Department of CSE

- Prof. Gaurav Kumar, Assistant Professor, Department of CSE has successfully completed a 12-week NPTEL Online Certification course on “Cloud Computing” with 72% ELITE from July to October 2024.



## Elite

# NPTEL ONLINE CERTIFICATION




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This certificate is awarded to  
**GAURAV KUMAR**  
for successfully completing the course  
**Cloud Computing**  
with a consolidated score of **72** %


Online Assignments	21.03/25	Proctored Exam	51.11/75
--------------------	----------	----------------	----------

Total number of candidates certified in this course: **30816**


**Jul-Oct 2024**  
(12 week course)




**Prof. Haimanti Banerji**  
Coordinator, NPTEL  
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Roll No: NPTEL24CS118S1052804605      To verify the certificate       No. of credits recommended: 3 or 4



**Prof. Radhika R**  
Assistant Professor  
Department of CSE

- Prof. Radhika K, Assistant Professor, Department of CSE has successfully completed a 12-week NPTEL Online Certification course on “Programming in Java” with 78% ELITE SILVER rating in Topper 5% from July to October 2024.

**Elite**

**NPTEL ONLINE CERTIFICATION**  
(Funded by the MoE, Govt. of India)

This certificate is awarded to  
**RADHIKA KOLAVALI**  
for successfully completing the course

**Programming in Java**

with a consolidated score of **78** %

Online Assignments	25/25	Proctored Exam	53.25/75
--------------------	-------	----------------	----------


Total number of candidates certified in this course: **15570**

Jul-Oct 2024  
(12 week course)

Prof. Haimanti Banerji  
Coordinator, NPTEL  
IIT Kharagpur

Indian Institute of Technology Kharagpur

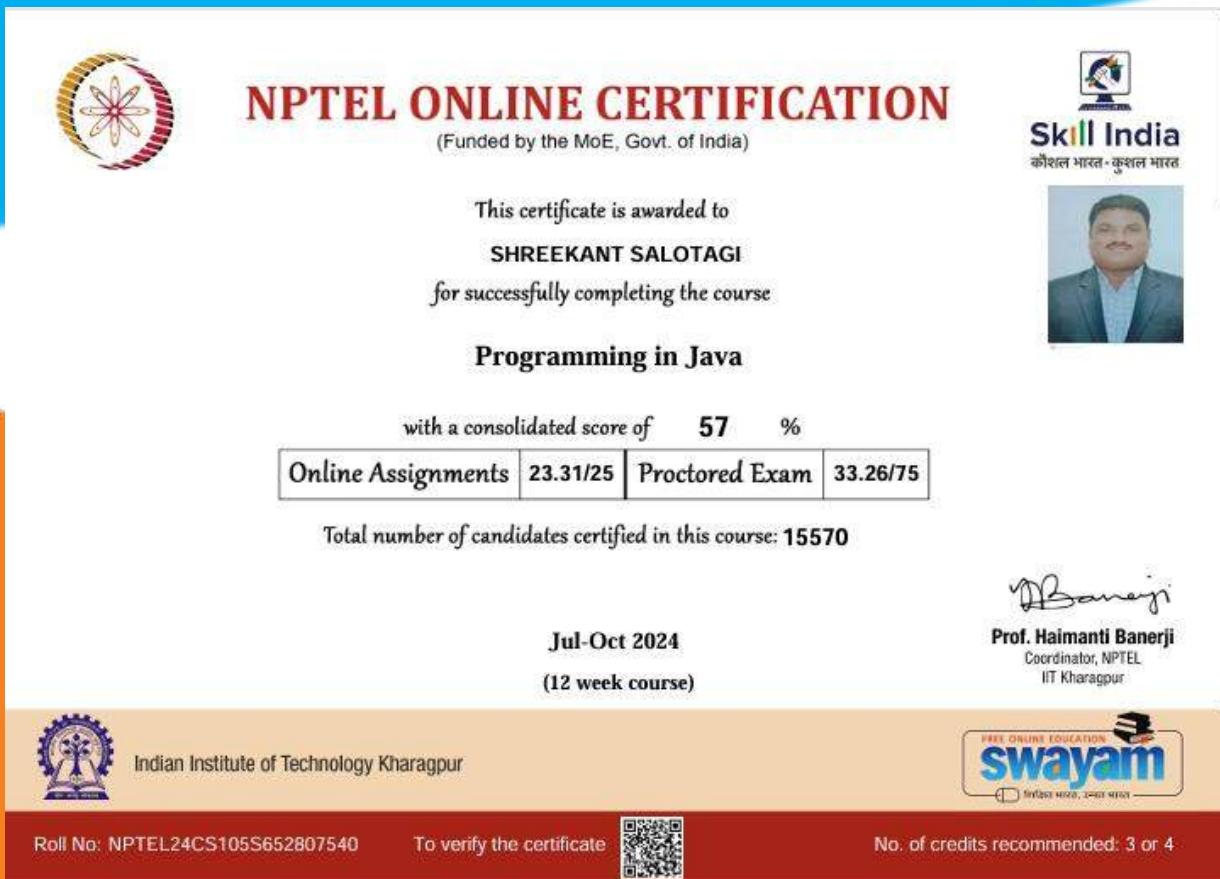
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INDIAN INSTITUTE OF TECHNOLOGY KHARAGPUR

Roll No: NPTEL24CS105S652803880      To verify the certificate       No. of credits recommended: 3 or 4



**Prof. Shreekant Salotagi**  
Assistant Professor  
Department of CSE

- Prof. Shreekant Salotagi, Assistant Professor, Department of CSE has successfully completed a 12-week NPTEL Online Certification course on “Programming in Java” with 57% from July to October 2024.



The certificate features the NPTEL logo on the left, the Skill India logo on the right, and a small portrait of Prof. Shreekant Salotagi. The text is centered and includes the course title, score, and exam details. At the bottom, it lists the IIT Kharagpur logo, the Swayam logo, and a QR code for verification.

**NPTEL ONLINE CERTIFICATION**  
(Funded by the MoE, Govt. of India)

This certificate is awarded to  
**SHREEKANT SALOTAGI**  
for successfully completing the course  
**Programming in Java**  
with a consolidated score of **57 %**

Online Assignments	23.31/25	Proctored Exam	33.26/75
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Total number of candidates certified in this course: **15570**

**Jul-Oct 2024**  
(12 week course)

**Prof. Haimanti Banerji**  
Coordinator, NPTEL  
IIT Kharagpur

Indian Institute of Technology Kharagpur

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स्वयं शिक्षा - स्वयं परीक्षा

Roll No: NPTEL24CS105S652807540      To verify the certificate       No. of credits recommended: 3 or 4



**Dr. Sivananda Reddy L**  
**Associate Professor**  
**Department of CSE**

- Dr. Sivananda Reddy L, Associate Professor, Department of CSE, successfully Published a Book as a Co-author with the title - "Next Gen AI and Machine Learning - Innovations for the Future" with ISBN-978-81-982371-1-8 and the publisher is Chendur Publishing house, Chennai during November 2024.

**NEXT-GEN AI AND MACHINE LEARNING:  
INNOVATIONS FOR THE FUTURE**

**AUTHORS**  
Dr. APARNA JOSHI  
Dr. SIVANANDA LAHARI REDDY  
CHIKKEPALLI NAGA PRADEEP KUMAR  
TALACHENDRI SURYAM

**AUTHORS PROFILE**

**Dr. Aparna Joshi** is working as Assistant professor in the Computer Engineering Department of Pimpri Chinchwad College of Engineering, Pune, Maharashtra, India. She has completed her PhD, Master and Bachelor degree in Computer Science and Engineering. She has 19 years of teaching experience. Her areas of interests are Cloud Computing, Cyber Security and Machine Learning. She has also published 40 plus quality research papers, articles, book chapters in various reputed Journals and conferences.

**Dr. Sivananda Lahari Reddy** is a distinguished IT professional with over 20 years of experience in Agile Transformation, Project Delivery, and Quality Assurance. He holds a Ph.D. in Computer Science and Technology, an M.Tech in IT, and an M.Sc. in Computer Science. Dr. Reddy has held leadership positions such as Vice President of Agile Transformation at ANZ Global Capability Centre and Agile Coach at ANZ Operations & Technology Pvt Ltd, where he led cross-functional teams, executed Agile Maturity Assessments, and improved organizational performance through role-based coaching. He is also certified as a Certified Independent Director and an Environmental and Social Governance (ESG) Expert, highlighting his commitment to governance and sustainability. Dr. Reddy is now working on the role of Associate Professor in DIU- CSE(SOE) department, where he aims to leverage his industry experience and academic expertise to shape the next generation of IT leaders.

**Chikkepalli Naga Pradeep Kumar** is a Lecturer in the Department of Computer Science at Sri Mahayogi Lalithamma Government Degree College, Vemiganur, Andhra Pradesh, India. He completed his M.Tech in Computer Science from JNTUA, Anantapur, and his B.Tech in Computer Science and Information Technology from JNTUH, Hyderabad. He is currently pursuing a Ph.D. at JNTUA, Anantapur, focusing on research in Machine Learning and Deep Learning. With over 10 years of teaching experience, he has also presented papers at various national and international conferences.

**Talachendri Suryam** had completed his postgraduate studies at INTUK in 2021. He was started his career as an Assistant Professor at Sambalika Institute of Technology and Management Engineering College. Later, he joined at Vignan Institute of Engineering for Women in Vialkhopatnam and now working as Asst.Prof in the dept of Computer Science and Engineering (DATA SCIENCE) at Vignan Institute of Technology and Science in Hyderabad. He has seven years of teaching experience. In 2023, he was Ratified as Asst.Prof in CSE Dept from JNTU GV University. He holds two valuable NPTEL certifications along with numerous certifications from various online courses, showcasing his commitment to continuous learning and professional development. He was also a member of the following professional bodies: IAENG and IDIWC.

₹ 900  
ISBN 978-81-982371-1-8  
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CHENNAI

- Dr. Sivananda Reddy L, Associate Professor, Department of CSE, successfully participated in 5 days of online FDP on “Next-Generation Technologies on Information and Communication” from 5th to 9th November 2024, Organized by Bengal College of Engineering and Technology.





**Prof. Muthu Bala N**  
**Assistant Professor**  
**Department of CSE**

- Prof. Muthu Bala N, Assistant Professor, Department of CSE, successfully participated in 5 days of online FDP on “Building Web Development Solutions with Cloud Computing” from 11th to 15th November 2024, Organized by Edunet Foundation under the Next Gen Employability program.





**Prof. Mala B A**  
**Assistant Professor**  
**Department of CSE**

- Prof. Mala B A, Assistant Professor, Department of CSE, successfully participated in One Week National Level Online FDP on “Recent Trends and Predictions in CyberSecurity” from 11/11/2024 to 16/11/2024 Organized by the Department of CSE at Madanapalle Institute of Technology and Science.





**Prof. Ramandeep Kaur**  
Assistant Professor  
Department of CST

- Prof. Ramandeep Kaur successfully completed the NPTEL online courses “Introduction to Internet of Things” and “Understanding Incubation and Entrepreneurship” from July to October 2024. (12-week course)

**Elite**  
**NPTEL ONLINE CERTIFICATION**  
(Funded by the MoE, Govt. of India)

This certificate is awarded to  
**RAMANDEEP KAUR**  
for successfully completing the course  
**Introduction to Internet of Things**  
with a consolidated score of **88** %

Online Assignments	24.56/25	Proctored Exam	63/75
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Total number of candidates certified in this course: 33131

Jul-Oct 2024  
(12 week course)

Indian Institute of Technology Kharagpur

Skill India  
शिक्षण मंत्रालय - भारत सरकार

Prof. Haimanti Banerji  
Coordinator, NPTEL  
IIT Kharagpur

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Roll No: NPTEL24CS115S752802756 To verify the certificate No. of credits recommended: 3 or 4

**Elite**  
**NPTEL ONLINE CERTIFICATION**  
(Funded by the MoE, Govt. of India)

This certificate is awarded to  
**RAMANDEEP KAUR**  
for successfully completing the course  
**Understanding Incubation and Entrepreneurship**  
with a consolidated score of **73** %

Online Assignments	24.28/25	Proctored Exam	49/75
--------------------	----------	----------------	-------

Total number of candidates certified in this course: 1479

Jul-Oct 2024  
(12 week course)

Indian Institute of Technology Bombay

Skill India  
शिक्षण मंत्रालय - भारत सरकार

Prof. Sridhar Iyer  
Head CDEEP & NPTEL Coordinator  
IIT Bombay

swayam

Roll No: NPTEL24DE15S352805960 To verify the certificate No. of credits recommended: 3 or 4



**Prof. Chithambarathanu M**  
**Assistant Professor**  
**Department of CST**

- Prof. Chithambarathanu M successfully completed the NPTEL online courses “Entrepreneurship” and “Operating System Fundamentals” from July to October 2024. (12-week course)

**Elite**

**NPTEL ONLINE CERTIFICATION**  
(Funded by the MoE, Govt. of India)

This certificate is awarded to  
**M CHITHAMBARATHANU**  
for successfully completing the course  
**Entrepreneurship**

with a consolidated score of **79** %

Online Assignments	24.38/25	Proctored Exam	54.75/75
--------------------	----------	----------------	----------

Total number of candidates certified in this course: 9746

Prof. Andrew Thangaraj  
Chair  
Centre for Outreach and Digital Education, IITM

Jul-Oct 2024  
(12 week course)

Prof. Vignesh Muthuvijayan  
NPTEL Coordinator  
IIT Madras

Indian Institute of Technology Madras

swayam

Roll No: NPTEL24MG93S552805367 To verify the certificate

No. of credits recommended: 3 or 4

**NPTEL ONLINE CERTIFICATION**  
(Funded by the MoE, Govt. of India)

This certificate is awarded to  
**M CHITHAMBARATHANU**  
for successfully completing the course  
**Operating System Fundamentals**

with a consolidated score of **53** %

Online Assignments	23.13/25	Proctored Exam	30/75
--------------------	----------	----------------	-------

Total number of candidates certified in this course: 2487

Jul-Oct 2024  
(12 week course)

Prof. Haimanti Banerji  
Coordinator, NPTEL  
IIT Kharagpur

Indian Institute of Technology Kharagpur

swayam

Roll No: NPTEL24CS108S652805585 To verify the certificate

No. of credits recommended: 3 or 4



**Prof. Nivetha NRP**  
Assistant Professor  
Department of CST

- Prof. Nivetha NRP successfully completed the NPTEL online courses “Understanding Incubation and Entrepreneurship” and “Cloud Computing” from July to October 2024. (12-week course)

**Elite**

**NPTEL ONLINE CERTIFICATION**  
(Funded by the MoE, Govt. of India)

This certificate is awarded to  
**NIVETHA NRP**  
for successfully completing the course

**Understanding Incubation and Entrepreneurship**

with a consolidated score of **77** %

Online Assignments	24.28/25	Proctored Exam	52.75/75
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Total number of candidates certified in this course: **1479**

Jul-Oct 2024  
(12 week course)

Prof. Sridhar Iyer  
Head CDEEP & NPTEL Coordinator  
IT Bombay

Indian Institute of Technology Bombay

Roll No: NPTEL24DE15S352807046 To verify the certificate No. of credits recommended: 3 or 4

**Elite**

**NPTEL ONLINE CERTIFICATION**  
(Funded by the MoE, Govt. of India)

This certificate is awarded to  
**NIVETHA NRP**  
for successfully completing the course

**Cloud Computing**

with a consolidated score of **80** %

Online Assignments	24.22/25	Proctored Exam	56.25/75
--------------------	----------	----------------	----------

Total number of candidates certified in this course: **30816**

Jul-Oct 2024  
(12 week course)

Prof. Haimanti Banerji  
Coordinator, NPTEL  
IT Kharagpur

Indian Institute of Technology Kharagpur

Roll No: NPTEL24CS118S952801434 To verify the certificate No. of credits recommended: 3 or 4



**Prof. Vinayaka V M**  
Assistant Professor  
Department of CST

- Prof. Vinayaka V M successfully completed the NPTEL online courses “Design & Implementation of Human-Computer Interfaces” and “Operating System Fundamentals” from July to October 2024. (12-week course)

**Elite NPTEL ONLINE CERTIFICATION**  
(Funded by the MoE, Govt. of India)

This certificate is awarded to **VINAYAKA V M** for successfully completing the course **Design & Implementation of Human-Computer Interfaces** with a consolidated score of **80 %**

Online Assignments	23.13/25	Proctored Exam	57/75
--------------------	----------	----------------	-------

Total number of candidates certified in this course: 5682

Jul-Oct 2024 (12 week course)

Prof. T. V. Bharat  
Head, Centre for Educational Technology  
NPTEL, Coordinator, IIT Guwahati

Indian Institute of Technology Guwahati

swayam

Roll No: NPTEL24CS1268752803390 To verify the certificate [QR Code] No. of credits recommended: 3 or 4

**Elite NPTEL ONLINE CERTIFICATION**  
(Funded by the MoE, Govt. of India)

This certificate is awarded to **VINAYAKA V M** for successfully completing the course **Operating System Fundamentals** with a consolidated score of **78 %**

Online Assignments	19.35/25	Proctored Exam	58.5/75
--------------------	----------	----------------	---------

Total number of candidates certified in this course: 2487

Jul-Oct 2024 (12 week course)

Prof. Haimanti Sanerji  
Coordinator, NPTEL  
IIT Kharagpur

Indian Institute of Technology Kharagpur

swayam

Roll No: NPTEL24CS1085552802956 To verify the certificate [QR Code] No. of credits recommended: 3 or 4

- Prof. Vinayaka has participated in a three-day online Faculty Development Programme (FDP) on “Unlocking the Potential of Data Analytics using Python, Power BI and Tableau” organized by the Department of CSE, Bangalore Institute of Technology held from 19th -21st November 2024

Rajya Vokkaligara Sangha  
**BANGALORE INSTITUTE OF TECHNOLOGY**  
(An Autonomous Institute Under VTUJ)  
Affiliated to Visvesvaraya Technological University, Accredited by AICTE, New Delhi, Accredited by NBA & NAAC A+  
K.R. Road, V.V. Pura, Bangalore - 560 004. Phone: 26613257/26615865 Fax: 22426796  
Website: <https://www.bit-bangalore.edu.in>  
Department of Computer Science and Engineering

**CERTIFICATE OF PARTICIPATION**

This is to certify that **Prof. VINAYAKA V M** of **Dayananda Sagar University** has participated in “**3-Day online FDP on Unlocking the Potential of Data Analytics Using Python, Power BI and Tableau**” organized by **Department of Computer Science and Engineering, Bangalore Institute of Technology** held from **19th - 21st November 2024**.

Dr. Girija J  
Hd., CS&E

Dr. J Prakash  
Vice Principal, BIT

Dr. Anwar M.E.  
Principal, BIT



**Dr. Sudha D**  
**Associate Professor**  
**Department of CST**

- Dr. Sudha successfully completed the NPTEL online courses “Entrepreneurship” and “Cloud Computing” from July to October 2024. (12-week course)

**Elite**  
**NPTEL ONLINE CERTIFICATION**  
(Funded by the MoE, Govt. of India)

This certificate is awarded to  
**DANTHULURI SUDHA**  
for successfully completing the course  
**Entrepreneurship**  
with a consolidated score of **78** %

Online Assignments	24.19/25	Proctored Exam	54/75
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Total number of candidates certified in this course: **9746**

Prof. Andrew Thangaraj  
Chair  
Centre for Outreach and Digital Education, IITM

Jul-Oct 2024  
(12 week course)

Prof. Vignesh Muthuvijayan  
NPTEL Coordinator  
IIT Madras

Indian Institute of Technology Madras

swayam

Roll No: NPTEL24MG93S552802820 To verify the certificate No. of credits recommended: 3 or 4

**Elite**  
**NPTEL ONLINE CERTIFICATION**  
(Funded by the MoE, Govt. of India)

This certificate is awarded to  
**DANTHULURI SUDHA**  
for successfully completing the course  
**Cloud Computing**  
with a consolidated score of **60** %

Online Assignments	24.38/25	Proctored Exam	35.37/75
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Total number of candidates certified in this course: **30816**

Jul-Oct 2024  
(12 week course)

Prof. Haimanti Banerji  
Coordinator, NPTEL  
IIT Kharagpur

Indian Institute of Technology Kharagpur

swayam

Roll No: NPTEL24CS116S952801656 To verify the certificate No. of credits recommended: 3 or 4



**Prof. Yashashwini B V**  
**Assistant Professor**  
**Department of CST**

- Prof. Yashashwini B V successfully completed the NPTEL online courses “Entrepreneurship” and “Operating System Fundamentals” from July to October 2024. (12-week course)

**Elite**  
**NPTEL ONLINE CERTIFICATION**  
(Funded by the MoE, Govt. of India)

This certificate is awarded to  
**YASHASWINI B V**  
for successfully completing the course  
**Entrepreneurship**

with a consolidated score of **69** %

Online Assignments	23.88/25	Proctored Exam	45/75
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Total number of candidates certified in this course: **9746**

Jul-Oct 2024  
(12 week course)

Indian Institute of Technology Madras

Roll No: NPTEL24MG93S552802968      To verify the certificate      No. of credits recommended: 3 or 4

**NPTEL ONLINE CERTIFICATION**  
(Funded by the MoE, Govt. of India)

This certificate is awarded to  
**YASHASWINI B V**  
for successfully completing the course  
**Responsible & Safe AI Systems**

with a consolidated score of **53** %

Online Assignments	20.28/25	Proctored Exam	32.25/75
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Total number of candidates certified in this course: **3358**

Jul-Oct 2024  
(12 week course)

International Institute of Information Technology, Hyderabad

Roll No: NPTEL24CS132S752803068      To verify the certificate      No. of credits recommended: 3 or 4

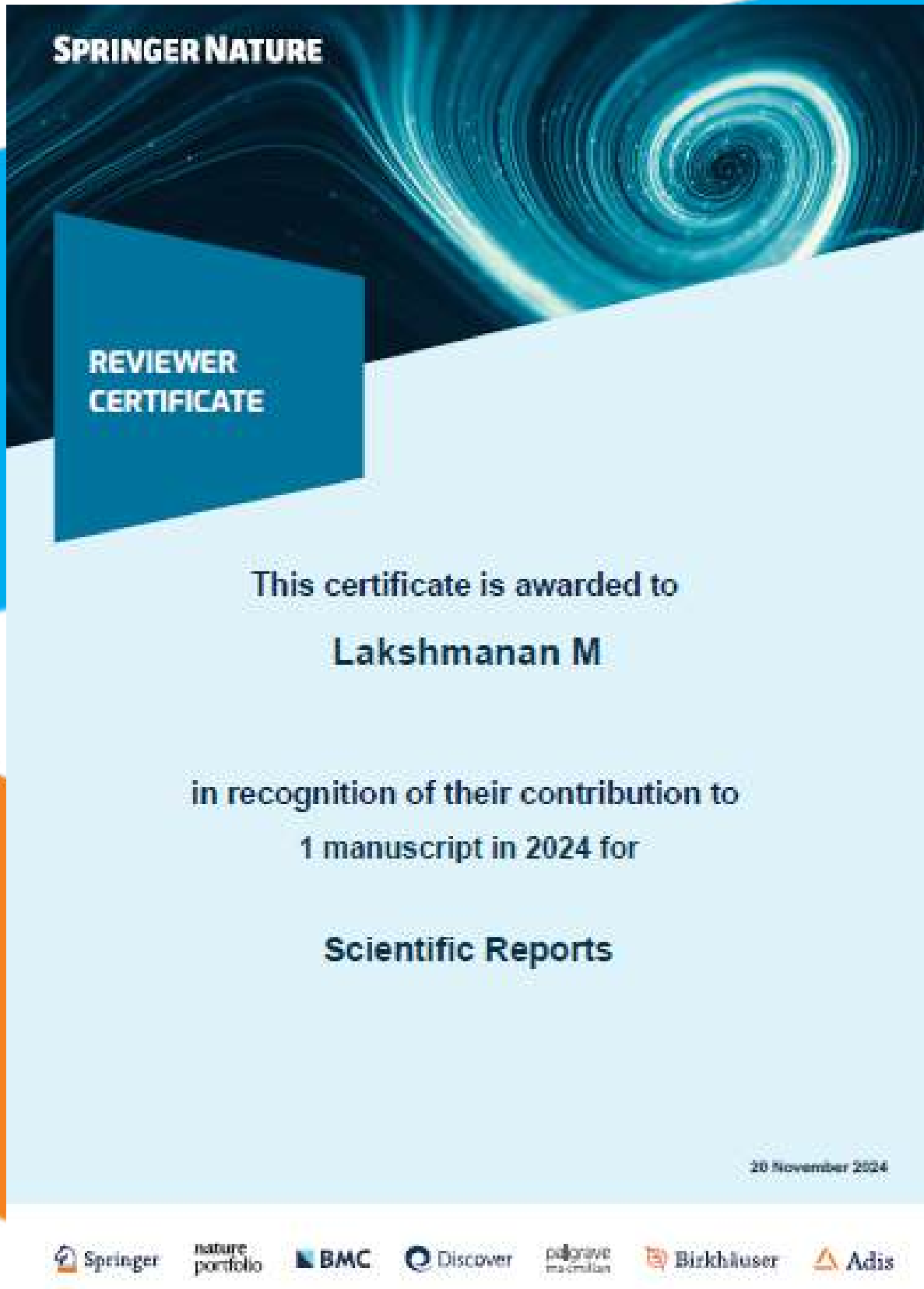


**Dr. M. Lakshmanan**  
**Assistant Professor**  
**Department of CSE(AIML)**

- Dr. M. Lakshmanan, Assistant Professor, Dept. of CSE (AI&ML) has participated in the Two days Faculty Development Program on “AWS CLOUD PRACTITIONER” Pioneering Innovations in Healthcare organized by the Department of Computer Science and Engineering, Sri Venkateswara College of Engineering from 11 Nov 2024 - 12 Nov 2024.



- Dr. M. Lakshmanan, Assistant Professor, Dept. of CSE (AI&ML) was awarded a reviewer certificate in recognition of their contribution to one manuscript in 2024 for Scientific Reports.



- Dr. M. Lakshmanan, Assistant Professor, Dept. of CSE (AI&ML) has participated as a reviewer in the peer review process of manuscripts submitted to “IEEE SILCON 2024”, the flagship conference of IEEE Silchar subsection, held at the National Institute of Technology Agartala, Tripura, India during November 15 - 17, 2024.



**Dr. Joshuva Arockia Dhanraj**  
**Associate Professor**  
**Department of CSE(AIML)**

- Dr. Joshuva Arockia Dhanraj, Associate Professor, Dept. of CSE (AI&ML) has been awarded the NPTEL certificate for successfully completing the 12-week (Jul-Oct 2024) NPTEL course on Introduction to Machine Learning.



# NPTEL ONLINE CERTIFICATION

(Funded by the MoE, Govt. of India)



This certificate is awarded to  
**JOSHUA AROCKIA DHANRAJ**  
for successfully completing the course



## Introduction to Machine Learning

with a consolidated score of **51** %

Online Assignments	20.6/25	Proctored Exam	30.62/75
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Total number of candidates certified in this course: 4541

Prof. Andrew Thangaraj  
Chair  
Centre for Outreach and Digital Education, IITM

Jul-Oct 2024

(12 week course)

Prof. Vignesh Muthuvijayan  
NPTEL Coordinator  
IIT Madras



Indian Institute of Technology Madras



Roll No: NPTEL24CS101S552807475

To verify the certificate



No. of credits recommended: 3 or 4



# NPTEL-AICTE Faculty Development Programme

(Funded by the MoE, Govt. of India)



This certificate is awarded to  
**JOSHUA AROCKIA DHANRAJ**  
for successfully completing the course



## Introduction to Machine Learning

with a consolidated score of **51** %

Prof. Andrew Thangaraj  
NPTEL Coordinator  
IIT Madras



(Jul-Oct 2024)

Roll No: NPTEL24CS101S552807475

Duration of NPTEL course : 12 Weeks

The candidate has studied the above course through MOOCs mode, has submitted online assignments and passed proctored exams.  
This certificate is therefore acceptable for promotions under CAS as per AICTE notifications dated 16<sup>th</sup> Nov, 2023, similar to other refresher / orientation courses.  
F.No. AICTE / RIFD / FDP through MOOCs / 2023

- Dr. Joshuva Arockia Dhanraj, Associate Professor, Dept. of CSE (AI&ML) received the Best Researcher Award from the Innovative Research & Education Academy, Cuddalore, Tamil Nadu, on November 29, 2024. The award recognizes his significant research contributions in Computer Science and Engineering for the academic year 2024-2025.





**INNOVATIVE RESEARCH & EDUCATION ACADEMY**


Certificate Number: IRE0901040

**INTERNATIONAL FACULTY AWARD 2024**  
**INNOVATIVE RESEARCH & EDUCATION ACADEMY**  
 (A division of THE RERU GROUP enterprise)

Cuddalore, Tamil Nadu, India  
 ISO 9001: 2015 Certified  
 UDYAM-TN-04-0062069

Registered under the Ministry of MSME, Govt of India  
**CERTIFICATE OF MERIT**  
**BEST RESEARCHER AWARD**

The award was presented to



**Dr. JOSHUA AROCKIA DHANRAJ**  
 M.Tech., M.B.A., Ph.D.,  
 Associate Professor  
 Department of Computer Science and Engineering (AI&ML)  
 School of Engineering  
 Dayananda Sagar University  
 Bengaluru - 562112, Karnataka, India

The Academy greatly appreciates and congratulates him for his research contributions to the specialization in Computer Science and Engineering for the academic year 2024-2025.

Date & Place: 29-November-2024, Cuddalore, TN, India.







**Dr. S. Lawenya**, M.Com., M.Phil., Ph.D.,  
 Founder and Director  
 Innovative Research & Education Academy  
 31, Jaya Nagar, Kondur,  
 Cuddalore - 607 002, Tamil Nadu, India  
 Mobile: 9894403457

<https://www.ire-academy.com/certificate-details-1/dr-joshuva-arockia-dhanraj->



**Dr. Mude Nagarjuna Naik**  
**Assistant Professor**  
**Department of CSE(AIML)**

- Dr. Mude Nagarjuna Naik, Assistant Professor, Dept. of CSE (AI&ML) has been awarded the NPTEL certificate for successfully completing the 12-week (Jul-Oct 2024) NPTEL course on Introduction to Internet of Things.



**Elite**  
**NPTEL ONLINE CERTIFICATION**  
 (Funded by the MoE, Govt. of India)

This certificate is awarded to  
**MUDE NAGARJUNA NAIK**  
 for successfully completing the course  
**Introduction to Internet of Things**  
 with a consolidated score of **85** %

Online Assignments	24.6/25	Proctored Exam	60/75
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Total number of candidates certified in this course: 33131

Jul-Oct 2024  
 (12 week course)

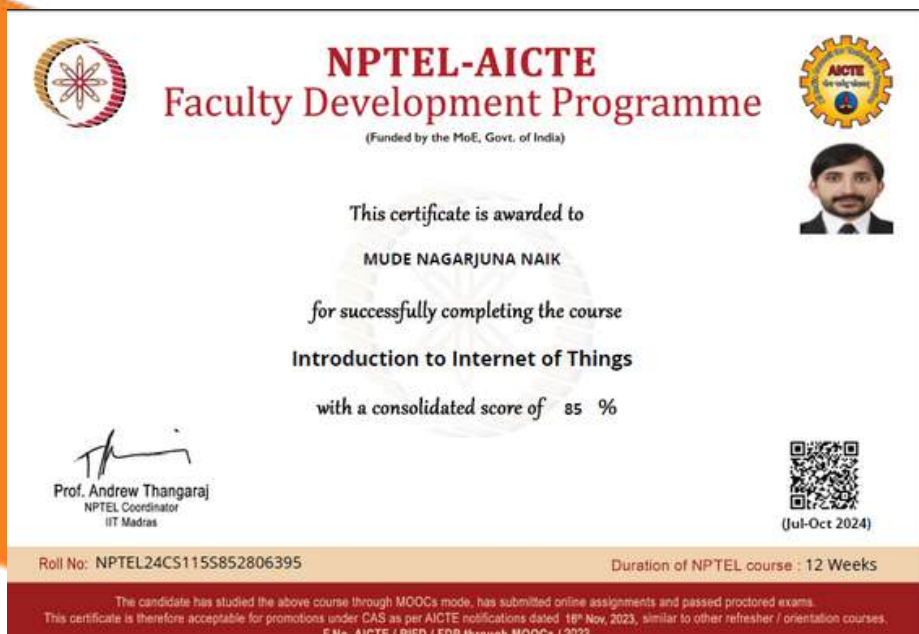
Indian Institute of Technology Kharagpur

Prof. Haimanti Banerji  
 Coordinator, NPTEL  
 IIT Kharagpur

swayam

Roll No: NPTEL24CS115S852806395 To verify the certificate

No. of credits recommended: 3 or 4



**NPTEL-AICTE**  
**Faculty Development Programme**  
 (Funded by the MoE, Govt. of India)

This certificate is awarded to  
**MUDE NAGARJUNA NAIK**  
 for successfully completing the course  
**Introduction to Internet of Things**  
 with a consolidated score of **85** %

Prof. Andrew Thangaraj  
 NPTEL Coordinator  
 IIT Madras

(Jul-Oct 2024)

Roll No: NPTEL24CS115S852806395 Duration of NPTEL course : 12 Weeks

The candidate has studied the above course through MOOCs mode, has submitted online assignments and passed proctored exams. This certificate is therefore acceptable for promotions under CAS as per AICTE notifications dated 18<sup>th</sup> Nov, 2023, similar to other refresher / orientation courses. F.No. AICTE / RIFD / FDP through MOOCs / 2023



**Dr. Shreyas Rajendra Hole**  
**Assistant Professor**  
**Department of CSE(AIML)**

- Dr. Shreyas Rajendra Hole, Assistant Professor, Dept. of CSE (AI&ML) has been awarded a certificate of appreciation for distinguished participation and valuable contribution in chairing the technical session ECPS&CI-2024 conference held on 8th-9th November 2024.





**Prof. Navya R**  
**Assistant Professor**  
**Department of ECE**

- Prof. Navya R has been awarded the degree of Doctor of Philosophy (Ph.D.) in Electronics and Communication Engineering by Dayananda Sagar University. Navya's research focused on "Sea Clutter Suppression in Surveillance Radar using Adaptive Clutter Modelling Techniques," addressing challenges in radar signal processing and offering advancements in clutter suppression methodologies. This achievement highlights our department's commitment to cutting-edge research in engineering. The degree was officially conferred on October 28, 2024, under the faculty of Engineering and Technology.





**Dr. Supraja Eduru**  
Assistant Professor  
Department of ECE

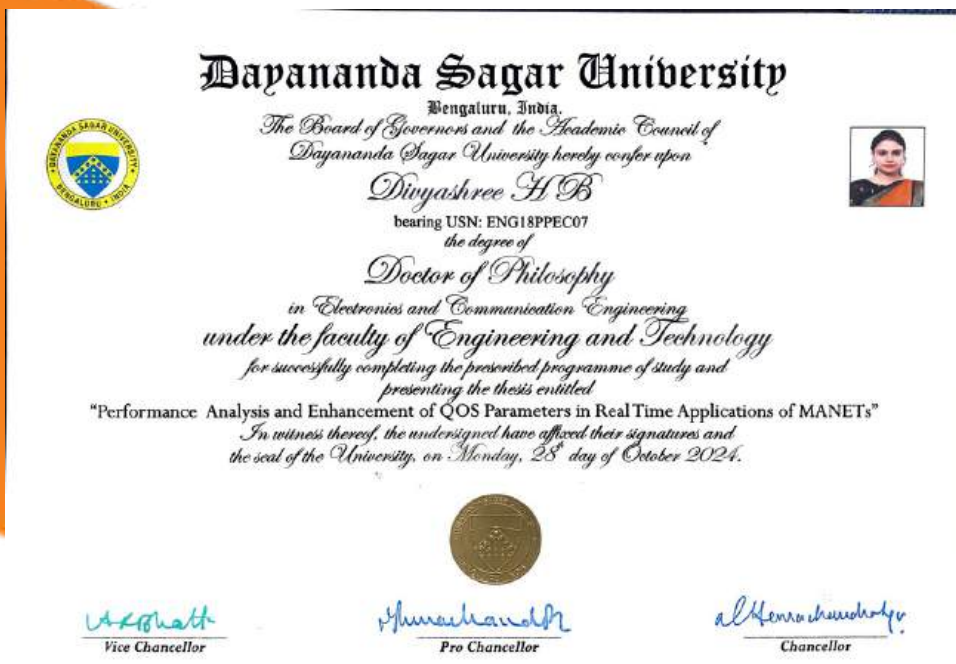
- Dr. Supraja Eduru has successfully completed a 12-week online NPTEL certification Course titled “Analog Electronic Circuits” during July-October 2024.





**Prof. Divyashree H B**  
**Assistant Professor**  
**Department of ECE**

- Prof. Divyashree H B was awarded a Doctor of Philosophy in the Department of Electronics & Communication Engineering under the guidance of Dr. Puttamadappa C, Registrar, Department of Electronics & Communication Engineering, DSU. Co-Guide: Dr. Nandini Prasad K S, Dean Foreign Affairs & HOD, Department of Information Science Engineering, DSATM, Bangalore. Title of the Thesis: Performance Analysis and Enhancement of QoS Parameters in Real-time Applications of MANET's





**Dr. Pushpa Mala S**  
Associate Professor  
Department of ECE

- Dr. Pushpa Mala S., Associate Professor in the Department of ECE participated in the IEEE PES R10 Women in Power (WIP) Summit held on 10th November 2024 at the Radisson Blu Hotel, Atria, Bengaluru.



- Dr. Pushpa Mala S., Associate Professor in the Department of ECE at DSU and Treasurer of the Women in Engineering IEEE Bangalore Chapter was invited as a guest of honor for the hackathon event "Samanvaya" held at DSCE from 8th to 10th November 2024.



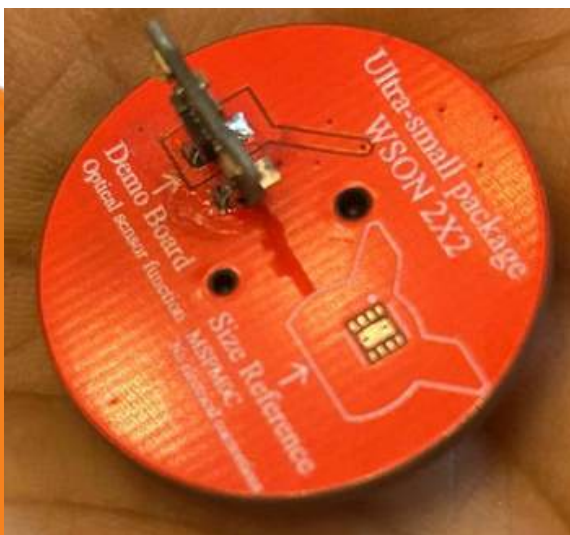
- Dr. Pushpa Mala S. has successfully completed an 8-week online NPTEL certification Course titled “Accreditation and Outcome Based Learning” during July-October 2024.



- Dr. Pushpa Mala S. Associate Professor from the Department of Electronics and Communication Engineering, Dayananda Sagar University, served as the Session Chair at the 3rd International Conference on Innovative Research and Development (ICIRD-2024) held from 8th to 11th November 2024 at Shinawatra University, Thailand.



- Dr. Pushpa Mala S, Associate Professor in the Department of Electronics and Communication Engineering at Dayananda Sagar University, participated in WINTECHCON 2024, the 5th IEEE Women in Technology Conference, held under the theme "Accelerating Chip Design in the Era of More-than-Moore".



### MSPM0C1103/4 – Ultra Low Cost MCU Industry's smallest MCU Package

MSPM0C1103/4		1.62 - 3.6V -40 to 125 C
<b>CPU</b> ARM Cortex-M0+ 24 MHz NVIC / 1-ch Basic DMA	<b>Communication</b> UART w/ LIN (1) SPI (1) I2C (1) w/ FastMode+	
<b>On-chip Memory</b> 8- or 16 kB flash 1 kB SRAM	<b>Precision Analog</b> 12-bit SAR ADC (10-ch) Internal ADC reference (1.5%)	
<b>Data Integrity &amp; Security</b> CRC accelerator (16 bit)	<b>Timers</b> Advanced control 16-bit 4 CC (1) General purpose 16-bit 4 CC (1) General purpose 16-bit 2 CC (1) Windowed watchdog	
<b>Programming &amp; Debug</b> ARM SWD interface	<b>IO</b> Up to 18 GPIO	
<b>Power &amp; Clocking</b> POR / BOR Internal LF 32kHz (3%) Internal HF 24MHz (1%)		

Loaded packages: SOT-8-16, VSSOP-20, TSSOP-20  
No-lead packages: WSON-8, WQFN-20



Scan here to learn more about the MSPM0C devices

TEXAS INSTRUMENTS



**Dr. Sneha Sharma**  
Assistant Professor  
Department of ECE

- Dr. Sneha Sharma., has successfully completed an 8-week online NPTEL certification Course titled “Accreditation and Outcome Based Learning” during July-October 2024.

**Elite**  
**NPTEL ONLINE CERTIFICATION**  
(Funded by the MoE, Govt. of India)

This certificate is awarded to  
**SNEHA SHARMA**  
for successfully completing the course  
**Accreditation and Outcome Based Learning**  
with a consolidated score of **94** %

Online Assignments	24.58/25	Proctored Exam	69.59/75
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Total number of candidates certified in this course: **1675**

Aug-Oct 2024  
(8 week course)

Indian Institute of Technology Kharagpur

Prof. Haimanti Banerji  
Coordinator, NPTEL  
IIT Kharagpur

swayam

Roll No: NPTEL24GE66S952800521 To verify the certificate No. of credits recommended: 2 or 3

**NPTEL-AICTE**  
**Faculty Development Programme**  
(Funded by the MoE, Govt. of India)

This certificate is awarded to  
**SNEHA SHARMA**  
for successfully completing the course  
**Accreditation and Outcome Based Learning**  
with a consolidated score of **94** %

Prof. Andrew Thangaraj  
NPTEL Coordinator  
IIT Madras

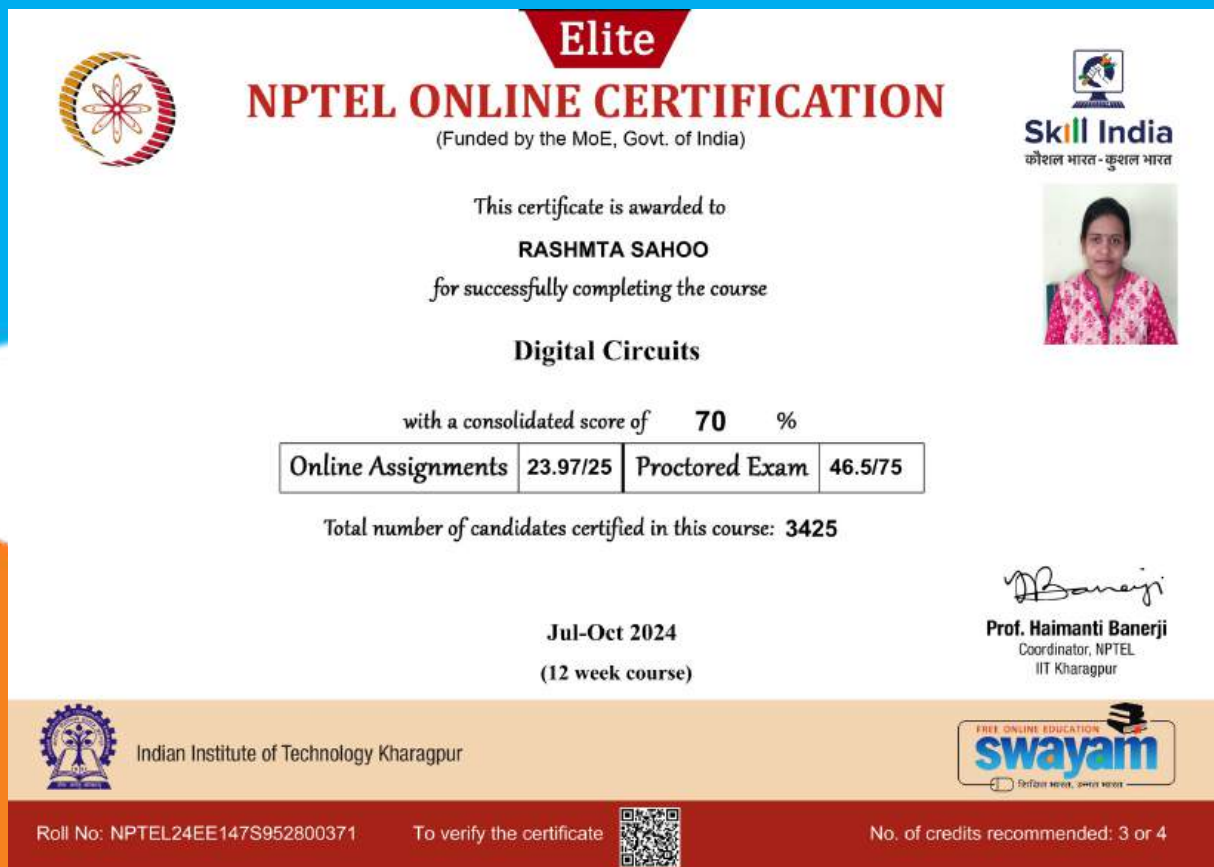
Roll No: NPTEL24GE66S952800521 Duration of NPTEL course : 8 Weeks

The candidate has studied the above course through MOOCs mode, has submitted online assignments and passed proctored exams. This certificate is therefore acceptable for promotions under CAS as per AICTE notifications dated 16<sup>th</sup> Nov, 2023, similar to other refresher / orientation courses. F.No. AICTE / RIFD / FDP through MOOCs / 2023



**Dr. Rashmita saho**  
**Assistant Professor**  
**Department of ECE**

- Dr. Rashmita Sahoo., has successfully completed 12-week online NPTEL certification Course titled “Digital Circuits” during July-October 2024.



**Elite**

**NPTEL ONLINE CERTIFICATION**  
(Funded by the MoE, Govt. of India)

This certificate is awarded to  
**RASHMITA SAHOO**  
for successfully completing the course  
**Digital Circuits**  
with a consolidated score of **70** %

Online Assignments	23.97/25	Proctored Exam	46.5/75
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Total number of candidates certified in this course: 3425


Jul-Oct 2024  
(12 week course)

Indian Institute of Technology Kharagpur

Prof. Haimanti Banerji  
Coordinator, NPTEL  
IIT Kharagpur

Roll No: NPTEL24EE147S952800371 To verify the certificate

No. of credits recommended: 3 or 4





**Prof. M Lorate Shiny**  
Assistant Professor  
Department of ECE

- Prof. Lorate Shiny., has successfully completed a 12-week online NPTEL certification Course titled “Digital Circuits” during July-October 2024.

**Elite**

**NPTEL ONLINE CERTIFICATION**  
(Funded by the MoE, Govt. of India)

This certificate is awarded to  
**M LORATE SHINY**  
for successfully completing the course  
**Digital Circuits**

with a consolidated score of **64** %

Online Assignments	23.56/25	Proctored Exam	40.5/75
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Total number of candidates certified in this course: **3425**

**Jul-Oct 2024**  
(12 week course)

**Prof. Haimanti Banerji**  
Coordinator, NPTEL  
IIT Kharagpur

Indian Institute of Technology Kharagpur

**swayam**  
FREE ONLINE EDUCATION  
विश्वविद्यालय भारत, उन्नत भारत

Roll No: NPTEL24EE147S952801363      To verify the certificate      No. of credits recommended: 3 or 4



**Dr. DEEPTHI CHAMKUR V**  
Assistant Professor  
Department of ECE

- Dr. Deepthi Chamkur V successfully completed a 12-week online NPTEL certification Course titled “Digital Circuits” from July to October 2024.

**Elite**

**NPTEL ONLINE CERTIFICATION**  
(Funded by the MoE, Govt. of India)

This certificate is awarded to  
**DEEPTHI CHAMKUR V**  
for successfully completing the course  
**Digital Circuits**

with a consolidated score of **69** %

Online Assignments	23.97/25	Proctored Exam	45/75
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Total number of candidates certified in this course: 3425

**Jul-Oct 2024**  
(12 week course)

**Prof. Haimanti Banerji**  
Coordinator, NPTEL  
IIT Kharagpur

Indian Institute of Technology Kharagpur

swayam  
FREE ONLINE EDUCATION  
एनपीटीएल सेक्टर, अमृत सेक्टर

Roll No: NPTEL24EE147S1052803582      To verify the certificate      No. of credits recommended: 3 or 4



**Dr. S. Arungalai Vendan**  
**Professor**  
**Department of ECE**

- Dr. S. Arungalai Vendan, Professor, Department of Electronics and Communication, Dayananda Sagar University, was invited as a resource person for the One Week AICTE Training and Learning (ATAL) Faculty Development Program (FDP) on Green Technology. The program was organized by the Department of Energy Science and Technology, Periyar University, Salem, from November 4th to November 9th, 2024. He delivered an expert session on Green Building Design and Architecture on November 6th, 2024, sharing his expertise with the participants.



**One Week AICTE Training and Learning (ATAL) Academy  
Faculty Development Program (FDP)**

**on  
GREEN TECHNOLOGY**

*Organized by*

**DEPARTMENT OF ENERGY SCIENCE & TECHNOLOGY**

**PERIYAR UNIVERSITY**

NAAC Accredited A++ Grade - State University - NIRF Rank 56 - State Public University Rank 25  
**SALEM-11**

04.10.2024

Invitation Letter

To  
Dr. S. Arungalai Vendan  
Professor  
Department of Electronics and Communication  
Dayananda Sagar University  
Bangalore - 560 068.

Greetings!  
Periyar University, Salem -INDIA

Department of Energy Science & Technology, Periyar University, Salem, is organizing One Week AICTE Training and Learning (ATAL) Academy Faculty Development Program (FDP) on **Green Technology** (4<sup>th</sup> November - 9<sup>th</sup> November 2024).

In this regard we are happy to invite you as a Resource Person on 06.11.2024 to this FDP, and also we expect to share your experience in Green Building Design and Architecture. Your participation would help to enhance the knowledge of participants and future collaboration with your institute.

We are expecting your presence to make this FDP as grand success.

**Dr.K.A.Ramesh Kumar**  
Coordinator - ATAL FDP  
Professor and Head  
Department of Energy Science & Technology  
Periyar University  
Salem-636 011.



**Dr. Arun Balodi**  
Chairman & Professor  
Department of ECE

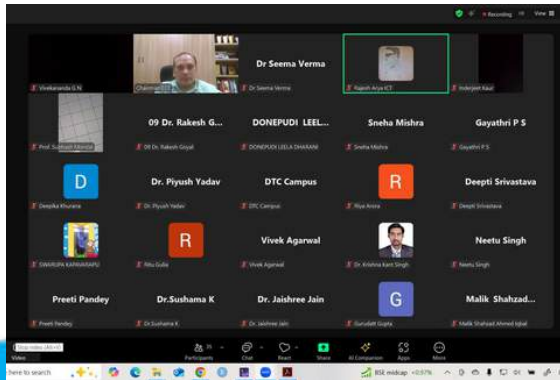
- Dr. Arun Balodi, Professor & Chairman of Electronics and Communication Engineering at Dayananda Sagar University, delivered a session on Reinforcement Learning in Healthcare at the FDP on Generative AI: Foundations, Applications, and Future Directions. The event, held on 20th November 2024, was organized by E&ICT Academy IIT Roorkee and Delhi Technical Campus, Greater Noida, showcasing advancements in AI and its applications in healthcare.

**FDP on Generative AI: Foundations,  
Applications, and Future Directions**  
Jointly organized by E&ICT Academy IIT Roorkee and Delhi  
Technical Campus, Greater Noida

**Reinforcement Learning in Healthcare**  
Dr. Arun Balodi, Professor & Chairman  
Department of Electronics and Communication Engineering



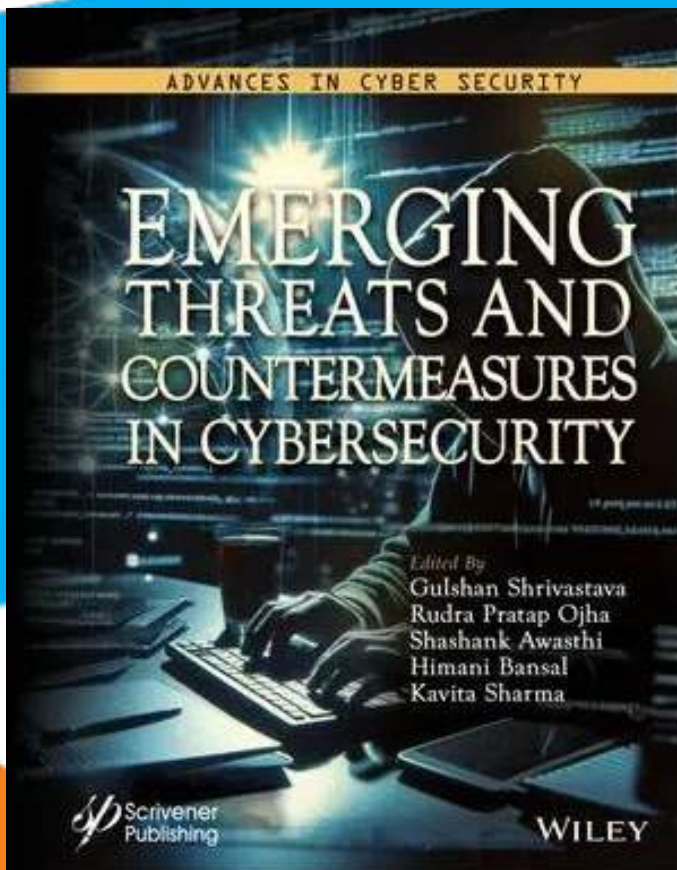
School of Engineering,  
Dayananda Sagar University, Bangalore.



- Dr. Arun Balodi, Professor and Chairman of the Department of Electronics and Communication Engineering at Dayananda Sagar University, was awarded a Certificate of Appreciation at the 8th International Conference on Smart Grid and Smart Cities (ICSGSC 2024). The conference, held from October 25–27, 2024, in Shanghai, China, recognized Dr. Balodi's outstanding contributions as a member of the technical committee and his significant efforts toward the event's success.



- Dr. Arun Balodi, Chairman of the Department of Electronics and Communication Engineering at Dayananda Sagar University, has co-authored the chapter "Insider Threat Detection and Prevention: New Approaches and Tools" in the renowned book "Emerging Threats and Countermeasures in Cybersecurity," published by Wiley.



WILEY  
Online Library



Emerging Threats and Countermeasures in  
Cybersecurity

Chapter 12

### Insider Threat Detection and Prevention

New Approaches and Tools

S. Rakhi, H. K. Sampada, Arun Balodi,

#### **Arun Balodi**

Department of ECE, Dayananda Sagar University,  
Bangalore, Karnataka, India

[Search for more papers by this author](#)



# SCHOOL OF ENGINEERING



## STUDENT ACHIEVEMENTS

- Mr. Job Jomy (ENG22DS0030) 5th Semester has actively participated in the “Amazon Web Services Workshop” held as part of TATHVA’24 conducted by the National Institute of Technology Calicut on 25, 26 & 27 October 2024.



- Mr. B Ganesh Reddy (ENG23DS0057) 3rd Semester has successfully completed the course Business Fundamentals for Entrepreneurs with a score of 94% in NPTEL Online Certification of 4-Week Course during Aug -Sep 2024.



- Ms. Priyanka. M (ENG23DS0026) 3rd semester from the “Team Evara” Fashion event won First Place in the Inter College Fashion event organized by T Johns Institute of Technology held on 16/11/2024.



- Mr. Shashi Kumar C (ENG23DS0034) has successfully completed the course Statistics for Data Science with Python issued by Coursera and authorized by IBM.



- Mr. Shashi Kumar C (ENG23DS0034) has successfully completed the HP LIFE online Course Effective Leadership in association with HP Foundation on 21-11-2024.



## Certificate of Completion

**Shashi Kumar C**

has successfully completed the HP LIFE online course

### Effective Leadership

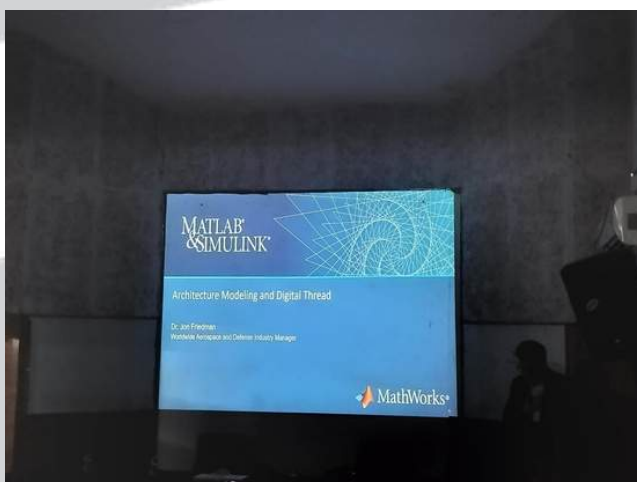
By completing this course, the above-named student has learned about effective leadership and its importance, how to successfully leverage different leadership strategies, and why ethics plays a role in effective leadership.

Presented 11/21/2024

Stephanie Bormann  
Deputy Director, HP Foundation

Certificate serial number: 19965e2279e8-430e-89f2-e04982a67704

- On November 14, 2024, third-year students Mr. Quaim Johar (ENG22AS0039) and Mr. Tejas (ENG22AS0045) from the Department of Aerospace Engineering attended an Industrial Roundtable organized by the Aeronautical Society of India (AeSI) at the AeSI Auditorium in Bengaluru. The students engaged in meaningful interactions with industry speakers and gained exposure to Model-Based Systems Engineering using MathWorks.



- Mr. K. Raghav (ENG21AS0016) and Mr. Yashas V. (ENG21AS0051) from the Department of Aerospace Engineering actively participated in a workshop titled "Essentials of Model Rocketry," organized by the Astronomical Society of India as part of Inspace's skill development program. The event took place from November 9 to 15, 2024, at the Jalahalli Bangalore Main Campus.



- Mr. V. Anand (ENG22CY0024) from fifth-semester cyber security has actively participated in the ACN Capture the Flag (CTF) competition, part of the Amrita CyberNation 3rd Edition, held from September 11 to 21, 2024, Organized by the Department of Computer Science and Engineering at the Amrita School of Computing, Chennai, this intense competition tested participants' skills in cybersecurity problem-solving and provided a platform for students to showcase their expertise.



- Mr. V. Anand (ENG22CY0024) from fifth-semester cyber security has actively participated as a member of Team "Cyberians", he took part in the "EnigmaXplore 2.0 CTF" competition, organized by the Indian Institute of Information Technology (IIIT), Nagpur, during TantraFiesta'24. Competing against several skilled teams, He contributed to solving complex cybersecurity challenges, demonstrating his proficiency and teamwork.



- Mr. V. Anand (ENG22CY0024) from fifth-semester cyber security has actively participated in the high-stakes Code Red event, organized by IEEE NITK, which brought together cybersecurity enthusiasts and professionals to solve a series of simulated real-world cybersecurity challenges. His participation in this event underscores his commitment to advancing his technical skills and engaging with the wider cybersecurity community.



- Mr. Saurav Pandey (ENG22CY0039) from Cyber Security won the second runner-up in the “Zerodha Varsity Quiz” held at DSU on 06.11.2024.



- Mr. Jashwanth A Shetty (ENG22CY0011), Mr. Prajwal N Halvi (ENG22CY0037), Mr. Adeesh Lokesh Poojary (ENG22CY0025), Ms. Bindhu N (ENG22CY0031), Mr. Yash Bagga (ENG22CY0050), Mr. Aditya G Kulkarni (ENG22CY0026), Mr. Raveena Dharmappa (ENG22CY0019), Mr. Darshan H Teppad (ENG22CY0008) from the Department of Cyber Security has actively participated in the “Zerodha Varsity Quiz” held at DSU on 06.11.2024.





- Mr. Khushal Kalal (ENG22CY0013) participated in the 2024 NASA International Space App Challenge titled "Galactic Problem Solver" on October 5th and 6th, 2024.



- Mr. Khushal Kalal (ENG22CY0013) attended the hands-on Workshop "Copilot Safari" organized by Azure Developer Community in association with Reskill.



- Ms. Bindhu N (ENG22CY0031) has participated in #include<her> Cohort 4.0 organized by She Builds on Azure held on 13th November 2024.



- Mr. Kishan. G. A (ENG23CY0020) participated in the Hackathon at INFOTSAV'24 held at ABV-IITM Gwalior on October 10, 2024.



- On November 6, 2024, a group of motivated and talented students from Dayananda Sagar University (DSU), specifically from the Computer Science and Engineering (CSE) Data Science participated in the "Zerodha Varsity Quiz" – Bangalore's premier finance quiz at Gallery Hall 1, 2, and 3, City Campus, Dayananda Sagar University (Kudlu Gate). This event was made possible by the dedicated coordination and support of Dr. Pavan Kumar U, a respected professor at DSU, who oversaw the organization, team registrations, and preparations. His guidance ensured that the students were well-prepared and fully equipped to compete in this prestigious event.

- Mr. Sai Kumar V Jadhav (ENG22CS0145), Mr. Rahul Jadvani (ENG22CS0129), Mr. Sachin Baluragi (ENG22CY0020), and Mr. Mohammed Yaseen Sutar (ENG22AM0182) from the 5th Semester along with his team has secured the First Runner-Up spot and prize money of ₹1,00,000 (one lakh rupees) in the prestigious AI & Data Science 24hrs Codeathon.

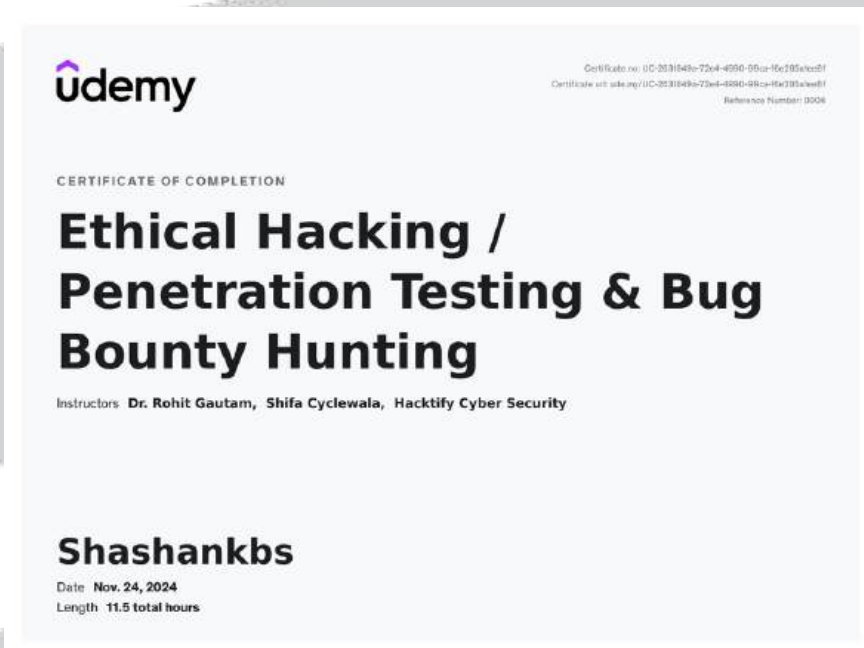


- Mr. Sachin Baluragi (ENG22CY0020), Mr. Rahul Jadvani (ENG22CS0129), Mr. Sai Kumar V Jadhav (ENG22CS0145), Mr. Mohammed Yaseen Sutar(ENG22AM0182), team of four members demonstrated exceptional innovation and technical expertise at Quantamaze 2.0 Hackathon, a 36-hour coding marathon organized by the Q-Bits Club of Nitte Meenakshi Institute of Technology, Bangalore, from November 14 to November 16, 2024. Competing in the domain of Web3 and Blockchain, the team was awarded the prestigious Best Project Award for their outstanding project titled FeedForward: Decentralized Food Redistribution Platform, aimed at revolutionizing food redistribution using blockchain technology.

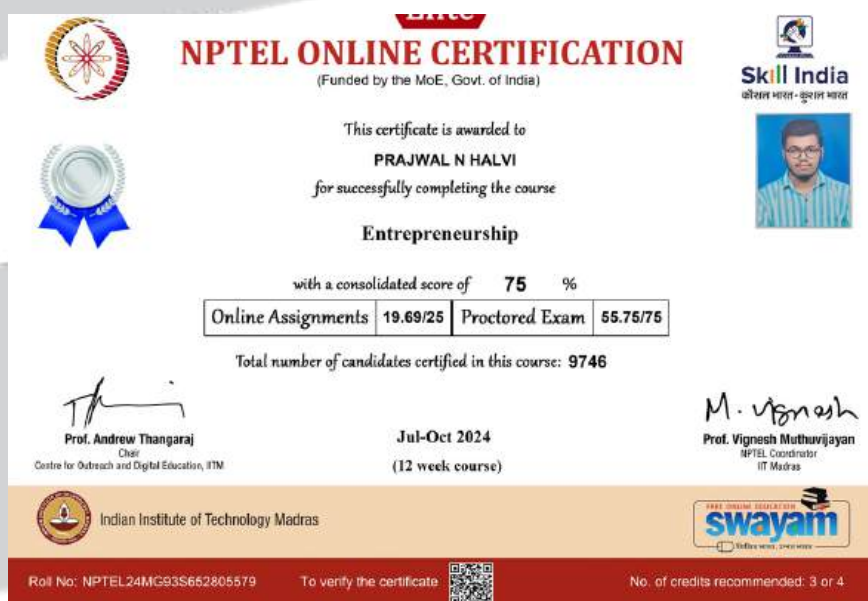




- Mr. Shashank B S (ENG21CY0040) obtained a certificate of completion for the course titled Ethical Hacking/Penetration Testing & Bug Bounty Hunting from Udemy on 24.11.2024 and the total duration of the course was 11.5 hours.



- Mr. Prajwal N Halvi (ENG22CY0037), has successfully completed a 12-week online NPTEL certification Course titled “Entrepreneurship” with Elite certification and a consolidated score of 75% during July-October 2024.



- Mr. Prajwal N Halvi (ENG22CY0037) has successfully completed a 12-week online NPTEL certification Course titled “Practical Cyber Security for Cyber Security Practitioners” with a consolidated score of 62% during July-October 2024.



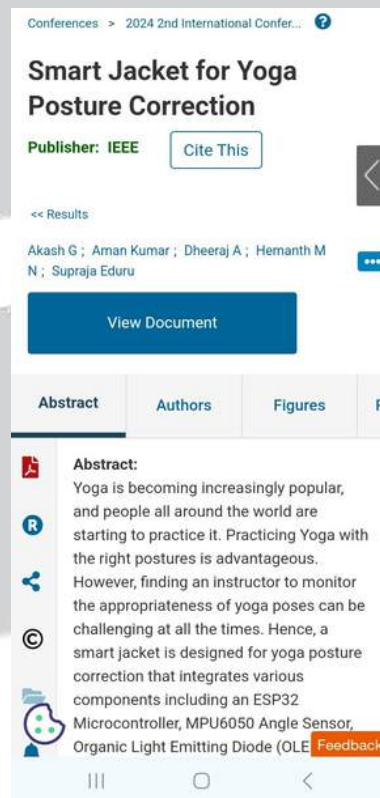
- Ms. Anagha R(ENG23CY0005) and Ms. Deepika N P (ENG23CY0012) successfully participated in the AI Quiz-organized by the IEEE CIS Student chapter from the Department of CSE (Artificial Intelligence and Machine Learning) on 20.11.2024 at Dayananda Sagar University.



- Ms. Indhushree D (ENG20EC0037) from the Electronics and Communication Engineering program achieved the First Rank in her class with an impressive CGPA of 9.28. Her outstanding academic performance has earned her the prestigious Gold Medal at the Eighth Annual Convocation of Dayananda Sagar University, held on October 28, 2024.



- Mr. Akash G (ENG20EC0006), Mr. Aman Kumar (ENG20EC0010), Mr. Dheeraj A (ENG20EC0027), and Mr. Hemanth M N (ENG20EC0034), under the guidance of faculty member Dr. Supraja Eduru, presented a paper titled "Smart Jacket for Yoga Posture Correction" at the 2024 2nd International Conference, published by IEEE ICNEWS 2024.



- Mr. Gowtham Rathore (ENG21ME005), a final year Mechanical Engineering student successfully presented a paper in a conference at IITM which was guided by Dr. Viswanathan R, Associate Professor.



- Mr. Chethan Keshav (ENG22AM0009), Mr. Ayden Alvito Xavier Joanes (ENG22AM0079), and Ms. Jiyansee Jain (ENG23CS0330), from the Department of CSE (AI&ML) secured 1st place at the Zerodha Varsity Quiz, winning a cash prize of ₹12,000.



- Mr. Mitesh Srinivasan (ENG22AM0034), Mr. T S Farhan (ENG22AM0065), and Mr. Ullas Chander (ENG22AM0066), from the Department of CSE (AI & ML), claimed the prestigious 2nd position at the Zerodha Varsity Quiz, winning a cash prize of ₹9,000.



- Ms. Sneha Patra, (ENG23AM0195), III semester student, Dept. of CSE (AI&ML) awarded second prize in Indian solo dance performance AT CHIGURU-2024 held at Cambridge Institute of Technology, Bengaluru on 23rd November 2024.



- Ms. Manyashree D (ENG23AM0043) 2nd year, AIML student who has successfully completed her 7-day State Level NSS camp! Manyashree actively participated as an NSS volunteer in the "State Level Youth Leadership Camp on Gandhian Values" and demonstrated exceptional leadership skills. Her dedication and enthusiasm were highly appreciated.



- Ms. B. Saishree (ENG22CS0260), Ms. Deepthi S V (ENG22CS0287), Ms. Deethiksha (ENG22CS0288), Ms. Harini Sri S (ENG22CS0314) and Ms. Monishree (ENG22CS0372) as a team of students selected to attend Pragati- Path to future skill program by Infosys Springboard 2024.

- A team of 12 students has successfully demonstrated the Rover project: 7 students from AIML Mr. Utpal Kumar (ENG22AM0139), Ms. Deekshitha M (ENG22AM0010), Mr. R Sujay (ENG22AM0122), Mr. Akshat Agarwal (ENG22AM0072), Mr. Pushkar Pallav (ENG22AM0187), Mr. K Vamsi Krishna (ENG22AM0102) and Mr. Rohan Jaiswal (ENG22CS0578), 2 students from ECE Ms. Renuka Anil Sutar (ENG22EC0092) & Mr. Rohan Susarla (ENG22EC0093) and 3 students from AE Ms. Tarita Shetty (ENG22AS1003), Mr. Yogesh V (ENG22AS1002) and Mr. Mithun (ENG22AS0034). The project was funded by the Centre for Space Science and Technology (CSST). As part of the requirements, the students have successfully completed the Rover Project and cleared the international Rover challenge screening round, which will be taking place at BITS GOA, in Jan 2025.



- Mr. Antriksh Singh (ENG20CS0037), Ms. Aditi Bharath (ENG20CS0014), Mr. Aryanjeet Singh (ENG20CS0042), and Ms. Ashmita Neog (ENG20CS0043), UG Scholars and Dr George Fernandez I, Associate Professor, Dept. CSE, School of Engineering, Dayananda Sagar University, Bengaluru, India, published a patent with the title “SMART-SEGREGATION OF WASTE MANAGEMENT USING IOT” and the applicant name “Dayananda Sagar University” on 6th of September 2024.

Application Status

APPLICATION TYPE: ORDINARY APPLICATION  
 DATE OF FILING: 26/08/2024  
 APPLICANT NAME: Dayananda Sagar University  
 TITLE OF INVENTION: INTELLIGENT WASTE SEGREGATION AND MANAGEMENT SYSTEM  
 FIELD OF INVENTION: MECHANICAL ENGINEERING  
 E-MAIL (As Per Record): omprakash@ormpatentservices.com  
 ADDITIONAL-EMAIL (As Per Record):  
 E-MAIL (UPDATED Online):  
 PRIORITY DATE:  
 REQUEST FOR EXAMINATION DATE: 29/08/2024  
 PUBLICATION DATE (U/S-11A): 06/09/2024

Application Status

APPLICATION STATUS: Application Awaiting Examination

View Documents

→ Filed → RQ Filed → Published → Under Examination → Disposed

Name in Full	Nationality	Country of Residence	Address of the Inventor
1. Antriksh Singh	Indian	India	House No. # 2042 Sobha Cinnamon & Saffron Apartment Street: Maralur Road, Kudlu Village City: Bengaluru State: Karnataka Country: India Pin code: 560068
2. Aditi Bharath	Indian	India	House No. # 39/3, Street: Main Channel Cross Road, Shamanna Gowda, Layout, Ulsoor City: Bengaluru State: Karnataka Country: India Pin code: 560008
3. Aryanjeet Singh	Indian	India	House No. 53 Arr Residency Street: 1 <sup>st</sup> cross Balaji Nagar 5G Palya City: Bengaluru State: Karnataka Country: India Pin code: 560029
4. Ashmita Neog	Indian	India	House No. Flat No. 004, Building No. 7, Shanthipark Apartments Street: Jayanagar 9th Block, City: Bengaluru State: Karnataka Country: India Pin code: 560041
5. George Fernandez J	Indian	India	House No. # 25, first floor Street: 3 <sup>rd</sup> cross, Sapthagiri layout, Vidyanarayapura City: Bengaluru State: Karnataka Country: India Pin code: 560097
5. TITLE OF THE INVENTION			
Intelligent Waste Segregation and Management System			
6. AUTHORISED REGISTERED PATENT AGENT(S)		IN/PA No.	1095

- Mr. Gaurav Shetty (ENG22CS0061), a 5th semester CSE student participated in the month-long online Hacktoberfest successfully with open-source contribution and each level unlocked certain limited edition badges during November 2024.



- The team "Shamsheer" led by Mr. Rohan Jaiswal (ENG22CS0578) has been shortlisted for the Grand finale of SIH 2024 under the Guidance of Dr. Bipin Kumar Rai, Professor, CSE.

SMART INDIA  
INNOVATION  
2024

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## SHORTLISTED TEAMS OF SIH 2024

(Batch 1)

**NEW** The Batch 1 of shortlisted teams for SIH 2024 Grand Finale is live. The pending results for remaining Problem Statements will be announced in coming few days.  
Please note that the waitlist teams will be announced with the last batch of result.

SIH1626	Government of NCT of Delhi	4	29777	10554	Shamsheer	Rohan Jaiswal	U-0856	DAYANANDA SAGAR UNIVERSITY	Bengaluru Urb
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- Mr. Omkar S G (ENG23CS0128), 3rd semester CSE student has successfully participated in the Zerodha Varsity Quiz held on 6th November 2024 at Dayananda Sagar University.



- Ms. Shaik Saara Shireen (ENG23CS0179), 3rd semester CSE student has successfully completed the Online courses on the Infosys Springboard platform with the course names “Start Programming in Core JAVA” and “Skill UP in JAVA Programming” during 6th and 8th November 2024 respectively.



- Mr. Chinnirathod Gandhikumar (ENG22CS0042), a 5th semester CSE student has successfully completed the Online Examination for “Applications & use cases Professional Certification” for the first 2 levels by a RAPIDMINER An ALTAIR Company in November 2024.



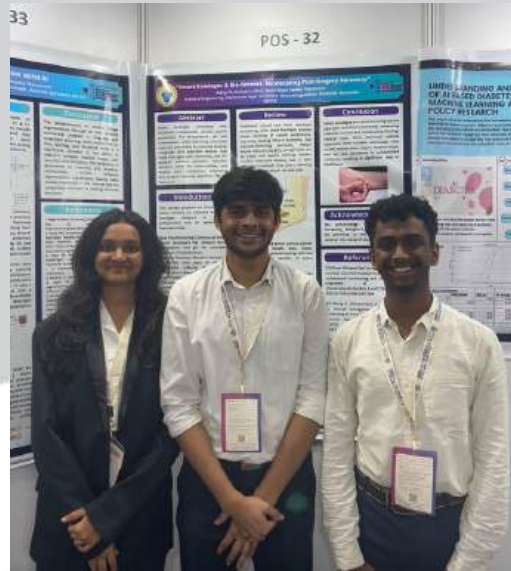
- Mr. Eshaan Bhat (ENG22CS0539), along with Mr. Emmanuel James (ENG22CS0540) from the CSE Department, secured the 2nd runner-up position at the Zerodha Varsity Quiz held on 6th November 2024 at the DSU Kudlu Gate Campus.



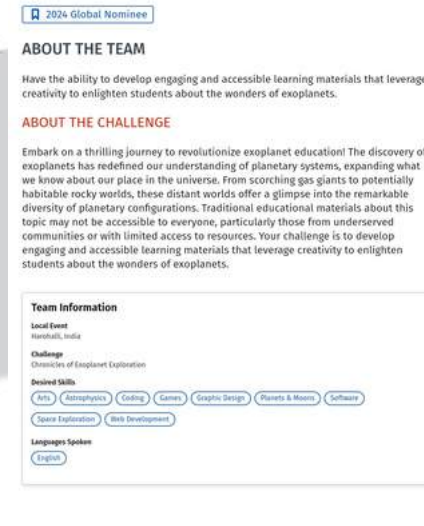
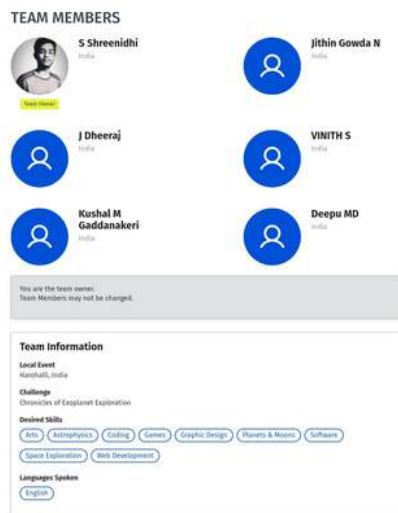
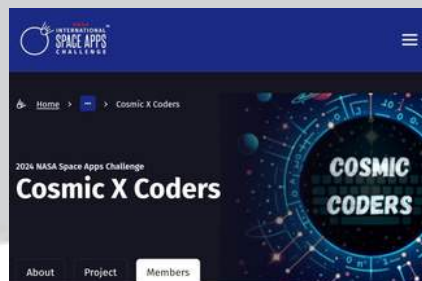
- Mr. Yash Soni (ENG22CS0211), 5th sem CSE student, Completed Certification from Tata Groups on the title “Data Visualisation: Empowering Business with Effective Insights” on Forage on 16th November 2024.



- Mr. Eshaan Bhat (ENG22CS0539), Ms. Smriti Sanjay Eligar (ENG22CS0172), and Mr. Aditya N (ENG22CS0519) Presented a poster on "Smart Bandages and Bio Sensors: Accelerating Post-surgery recovery" at Bengaluru Tech Summit-BTS 2024 from 19th to 21st November 2024 at Bengaluru palace.



- Mr. S Shreenidhi (ENG23CS0169), Mr. Vinith S (ENG23CS0221), and Mr. Jithin Gowda N (ENG23CS0328) as a team of "Cosmic X Coders" were shortlisted as the Global Nominee for the NASA Space Apps Challenge 2024.



- Mr. Shambuling (ENG23CS0180), 3rd Semester, Dept of CSE has successfully attended the Bengaluru Tech Summit-BTS 2024 from 19th to 21st November 2024 at Bengaluru palace as a Visitor.



- Mr. Amith R (ENG21CS0033) and Ms. D Akshitha (ENG21CS0102), 7th semester, Department of CSE, under the guidance of Dr. Pramod Kumar Naik, published a research paper "An Advanced Approach to Detect and Classify Lung Nodules Using CT Images" at the "International Conference for Machine Learning Algorithms" held at Chitkara University, Himachal Pradesh.  
[https://link.springer.com/chapter/10.1007/978-3-031-75861-4\\_35](https://link.springer.com/chapter/10.1007/978-3-031-75861-4_35).

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Home > Machine Learning Algorithms > Conference paper

## An Advanced Approach to Detect and Classify Lung Nodules Using CT Images

Conference paper | First Online: 12 November 2024  
pp 391–400 | [Cite this conference paper](#)



**Machine Learning Algorithms**  
(ICMLA 2024)

Pramod Kumar Naik R. Amith, D. Akshitha & B. Sadhana

Part of the book series: *Communications in Computer and Information Science* ((CCIS, volume 2238))

Included in the following conference series:  
[International Conference on Machine Learning Algorithms](#)

28 Accesses

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Chapter EUR 29.95  
Price includes VAT (India)

- Available as PDF
- Read on your device

- Ms. Shravya K S(ENG22CS0455), from 3rd year CSE, successfully participated in the HAXLR8-HACKATHON Event held on 15th November 2024, organized by Dept. of ECE, Maharaja Institute of Technology Mysore.



- Mr. Darshan Kumar M (ENG20CS0081), Mr. Guntur Lohith Sai (ENG20CS0106), Mr. Jasin Jayachandran (ENG20CS0131), and Mr. Kapil Adarsh S A (ENG20CS0143) students of CSE under the Guidance of Prof. Suvika K V, Assistant professor, published a paper in the Scopus indexed Journal with the title "Continuous user Authentication through Keystroke Dynamics" in the Journal GRENZE International Journal of Engineering and Technology during November 2024.



- Mr. Karanveer Singh (ENG21CS1027), Ms. Akshaya Singh (ENG20CS0022), Mr. Saksham Dubey (ENG20CS0310), and Mr. Hemang Verma (ENG19CS0119) students CSE under the Guidance of Prof. Mala B A, Assistant professor, published a paper in the Scopus indexed Journal with the title “Smart Bin: A Segregation and Management of Garbage for Smart City using IoT” in the Journal GRENZE International Journal of Engineering and Technology during November 2024.



- Ms. Sree Vibha G (ENG21CS0412), Ms. Sindhu Vijay (ENG21CS0399), Ms. Sri Vishnavi Ananya Gollapalli (ENG21CS0414), Mr. Syed Safwan Ghouri (ENG21CS0438), Mr. Syed Rayan (ENG21CS0437) and Mr. Sudeep Biradar (ENG21CS0437) students of 7th Semester CSE students successfully completed 12 weeks NPTEL Online Certification course on Software Testing from July to October 2024.





**NPTEL ONLINE CERTIFICATION**  
(Funded by the MoE, Govt. of India)

This certificate is awarded to  
**SRI VISHNAVI ANANYA GOLLAPALLI**  
for successfully completing the course

**Software Testing**

with a consolidated score of **56** %

Online Assignments	19.69/25	Proctored Exam	36/75
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Total number of candidates certified in this course: **5340**

*R. Pradeep*  
Dr. Chandrashekar Ramamoorthi  
Chairman  
Professor and Dean (Academics), IIT - Bangalore

Jul-Oct 2024  
(12 week course)

*Prof. Andrew Thangaraj*  
Prof. Andrew Thangaraj  
NPTEL, Coordinator  
IIT Madras

INTERNATIONAL INSTITUTE OF INFORMATION TECHNOLOGY BANGALORE

swayam

Roll No: NPTEL24CS813302804000 To verify the certificate No. of credits recommended: 3 or 4



**NPTEL ONLINE CERTIFICATION**  
(Funded by the MoE, Govt. of India)

This certificate is awarded to  
**SYED SAFWAN GHOURI**  
for successfully completing the course

**Software Testing**

with a consolidated score of **55** %

Online Assignments	20.31/25	Proctored Exam	34.5/75
--------------------	----------	----------------	---------

Total number of candidates certified in this course: **5340**

*R. Pradeep*  
Dr. Chandrashekar Ramamoorthi  
Chairman  
Professor and Dean (Academics), IIT - Bangalore

Jul-Oct 2024  
(12 week course)

*Prof. Andrew Thangaraj*  
Prof. Andrew Thangaraj  
NPTEL, Coordinator  
IIT Madras

INTERNATIONAL INSTITUTE OF INFORMATION TECHNOLOGY BANGALORE

swayam

Roll No: NPTEL24CS813302800549 To verify the certificate No. of credits recommended: 3 or 4



**NPTEL ONLINE CERTIFICATION**  
(Funded by the MoE, Govt. of India)

This certificate is awarded to  
**SYED RAYAN**  
for successfully completing the course

**Software Testing**

with a consolidated score of **56** %

Online Assignments	20/25	Proctored Exam	36/75
--------------------	-------	----------------	-------

Total number of candidates certified in this course: **5340**

*R. Pradeep*  
Dr. Chandrashekar Ramamoorthi  
Chairman  
Professor and Dean (Academics), IIT - Bangalore

Jul-Oct 2024  
(12 week course)

*Prof. Andrew Thangaraj*  
Prof. Andrew Thangaraj  
NPTEL, Coordinator  
IIT Madras

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Roll No: NPTEL24CS813302801130 To verify the certificate No. of credits recommended: 3 or 4



**NPTEL ONLINE CERTIFICATION**  
(Funded by the MoE, Govt. of India)

This certificate is awarded to  
**SUDEEP BIRADAR**  
for successfully completing the course

**Software Testing**

with a consolidated score of **52** %

Online Assignments	16.72/25	Proctored Exam	33/75
--------------------	----------	----------------	-------

Total number of candidates certified in this course: **5340**

*R. Pradeep*  
Dr. Chandrashekar Ramamoorthi  
Chairman  
Professor and Dean (Academics), IIT - Bangalore

Jul-Oct 2024  
(12 week course)

*Prof. Andrew Thangaraj*  
Prof. Andrew Thangaraj  
NPTEL, Coordinator  
IIT Madras

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Roll No: NPTEL24CS813302804056 To verify the certificate No. of credits recommended: 3 or 4

- Ms. Smriti Singh (ENG21CS0404) of 7th Semester CSE has successfully completed a 12-week NPTEL Online Certification course on Introduction to Industry 4.0 and Industrial Internet of Things from July to October 2024.



**Elite**

**NPTEL ONLINE CERTIFICATION**  
(Funded by the MoE, Govt. of India)

This certificate is awarded to  
**SMRITI SINGH**  
for successfully completing the course

**Introduction to Industry 4.0 and Industrial Internet of Things**

with a consolidated score of **76** %

Online Assignments	25/25	Proctored Exam	51/75
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Total number of candidates certified in this course: **15725**

Jul-Oct 2024  
(12 week course)

*Prof. Haimanti Banerji*  
Prof. Haimanti Banerji  
Coordinator, NPTEL  
IIT Kharagpur

Indian Institute of Technology Kharagpur

swayam

Roll No: NPTEL24CS95S352805948 To verify the certificate No. of credits recommended: 3 or 4

- Ms. Charmi V (ENG23CS0291), 3rd Semester, Dept of CSE has successfully participated and won 1st prize in the GLAM-ICON Fashion Show-2024, Organized by the Department of Fashion and Apparel Design, T. John College, Bengaluru, during 15th November 2024 and She also attended the AI-Quiz organized by IEEE CIS Student Chapter, department of CSE(AIML), SOE, DSU during 20th November 2024.



- Ms. Jyothishree (ENG22CT0008) has been shortlisted for the grand finale of SIH 2024.

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## SHORTLISTED TEAMS OF SIH 2024

(Batch 2)

SIH1719	Ministry of Social Justice and Empowerment	3	27901	38685	TechSpectra	Harish Lukare	C-41256	K.K.Wagh Education Society's K.K.Wagh Institute of Engineering Education & Research, Hirabai Haribai Vidyanageri, Panchavati, Nashik 422003	Nashik	Maharashtra	SELECTED
SIH1719	Ministry of Social Justice and Empowerment	4	17591	7271	Poriyaalargal_07	Aiswariya S	C-36989	KGISL Institute of Technology	Coimbatore	Tamil Nadu	SELECTED
SIH1719	Ministry of Social Justice and Empowerment	5	21162	10411	Zephyr1	Nikhil Kumar	U-0856	DAVANANDA SAGAR UNIVERSITY	Bengaluru Urban	Karnataka	SELECTED

- On November 21, 2024, the 4th-year CST students, Mr. Allan D'Souza (ENG21CT0002), Ms. Swathi (ENG21CT0043), Mr. Swaroop (ENG21CT0041), and Mr. Jaice (ENG21CT0011) participated and exhibited their projects at the Bangalore Summit 2024 event, which provided innovative solutions aimed at addressing real-world challenges through cutting-edge technology.



- Ms. Ashritha Arunkumar (ENG22CT0003), Ms. B Dhivya (ENG22CT0004), Mr. Danesh H M (ENG22CT0005), Mr. Krishna Rathod (ENG22CT0010), Ms. Lavanya B M (ENG22CT0011), Mr. Lokesh J (ENG22CT0012), Ms. Manasvini V (ENG22CT0013), Mr. MD Haseebuddin (ENG22CT0014), Ms. Pranati Biswal (ENG22CT0016), Ms. Sanmathi Y A (ENG22CT0018), Mr. Tharun C E (ENG22CT0020), Ms. Varshini Balakrishna (ENG22CT0021), Mr. Abhinav Sinha (ENG22CT0025), Mr. D Jayanth (ENG22CT0027), Ms. D Gnana Prasoon (ENG22CT0028), Mr. Nishant Kumar Dubey (ENG22CT0030), Mr. Rishav Aditya (ENG22CT0032), Mr. Vishal D (ENG22CT0037), Ms. Nancy Sharma (ENG22CT0043), and Mr. Ahmed Talwar (ENG22CT1001) successfully completed the NPTEL online courses "Introduction to Internet of Things" from July to October 2024. (12-week course)

**Elite**  
**NPTEL ONLINE CERTIFICATION**  
(Funded by the MoE, Govt. of India)

This certificate is awarded to  
**ASHRITHA ARUNKUMAR**  
for successfully completing the course

**Introduction to Internet of Things**

with a consolidated score of **94** %

Online Assignments	25/25	Proctored Exam	69/75
--------------------	-------	----------------	-------

Total number of candidates certified in this course: 33131

Jul-Oct 2024  
(12 week course)

Indian Institute of Technology Kharagpur

Skill India  
शिक्षण-सिखने का नया रास्ता

Prof. Haimanti Banerji  
Coordinator, NPTEL  
IIT Kharagpur

**swayam**

Roll No: NPTEL24CS1155852806786 To verify the certificate No. of credits recommended: 3 or 4

**Elite**  
**NPTEL ONLINE CERTIFICATION**  
(Funded by the MoE, Govt. of India)

This certificate is awarded to  
**B DHIVYA**  
for successfully completing the course

**Introduction to Internet of Things**

with a consolidated score of **87** %

Online Assignments	25/25	Proctored Exam	61.5/75
--------------------	-------	----------------	---------

Total number of candidates certified in this course: 33131

Jul-Oct 2024  
(12 week course)

Indian Institute of Technology Kharagpur

Skill India  
शिक्षण-सिखने का नया रास्ता

Prof. Haimanti Banerji  
Coordinator, NPTEL  
IIT Kharagpur

**swayam**

Roll No: NPTEL24CS1155852807319 To verify the certificate No. of credits recommended: 3 or 4

**Elite**  
**NPTEL ONLINE CERTIFICATION**  
(Funded by the MoE, Govt. of India)

This certificate is awarded to  
**DANESH H M**  
for successfully completing the course

**Introduction to Internet of Things**

with a consolidated score of **84** %

Online Assignments	23.72/25	Proctored Exam	60/75
--------------------	----------	----------------	-------

Total number of candidates certified in this course: 33131

Jul-Oct 2024  
(12 week course)

Indian Institute of Technology Kharagpur

Skill India  
शिक्षण-सिखने का नया रास्ता

Prof. Haimanti Banerji  
Coordinator, NPTEL  
IIT Kharagpur

**swayam**

Roll No: NPTEL24CS1155752804243 To verify the certificate No. of credits recommended: 3 or 4

**Elite**  
**NPTEL ONLINE CERTIFICATION**  
(Funded by the MoE, Govt. of India)

This certificate is awarded to  
**KRISHNA RATHOD**  
for successfully completing the course

**Introduction to Internet of Things**

with a consolidated score of **51** %

Online Assignments	21.25/25	Proctored Exam	30/75
--------------------	----------	----------------	-------

Total number of candidates certified in this course: 33131

Jul-Oct 2024  
(12 week course)

Indian Institute of Technology Kharagpur

Skill India  
शिक्षण-सिखने का नया रास्ता

Prof. Haimanti Banerji  
Coordinator, NPTEL  
IIT Kharagpur

**swayam**

Roll No: NPTEL24CS1155754800099 To verify the certificate No. of credits recommended: 3 or 4

**Elite**  
**NPTEL ONLINE CERTIFICATION**  
(Funded by the MoE, Govt. of India)

This certificate is awarded to  
**LAVANYA B M**  
for successfully completing the course

**Introduction to Internet of Things**

with a consolidated score of **90** %

Online Assignments	22.91/25	Proctored Exam	67/75
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Total number of candidates certified in this course: 33131

Jul-Oct 2024  
(12 week course)

Indian Institute of Technology Kharagpur

Skill India  
शिक्षण-सिखने का नया रास्ता

Prof. Haimanti Banerji  
Coordinator, NPTEL  
IIT Kharagpur

**swayam**

Roll No: NPTEL24CS1155852806070 To verify the certificate No. of credits recommended: 3 or 4

**Elite**  
**NPTEL ONLINE CERTIFICATION**  
(Funded by the MoE, Govt. of India)

This certificate is awarded to  
**LOKESH J**  
for successfully completing the course

**Introduction to Internet of Things**

with a consolidated score of **87** %

Online Assignments	23.94/25	Proctored Exam	63/75
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Total number of candidates certified in this course: 33131

Jul-Oct 2024  
(12 week course)

Indian Institute of Technology Kharagpur

Skill India  
शिक्षण-सिखने का नया रास्ता

Prof. Haimanti Banerji  
Coordinator, NPTEL  
IIT Kharagpur

**swayam**

Roll No: NPTEL24CS1155752804263 To verify the certificate No. of credits recommended: 3 or 4

**Elite**  
**NPTEL ONLINE CERTIFICATION**  
(Funded by the MoE, Govt. of India)

This certificate is awarded to  
**MANASVINI V**  
for successfully completing the course

**Introduction to Internet of Things**

with a consolidated score of **93** %

Online Assignments	25/25	Proctored Exam	67.5/75
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Total number of candidates certified in this course: 33131

Jul-Oct 2024  
(12 week course)

Indian Institute of Technology Kharagpur

Skill India  
शिक्षण-सिखने का नया रास्ता

Prof. Haimanti Banerji  
Coordinator, NPTEL  
IIT Kharagpur

**swayam**

Roll No: NPTEL24CS1155852806855 To verify the certificate No. of credits recommended: 3 or 4

**Elite**  
**NPTEL ONLINE CERTIFICATION**  
(Funded by the MoE, Govt. of India)

This certificate is awarded to  
**MD HASEEBUDDIN**  
for successfully completing the course

**Introduction to Internet of Things**

with a consolidated score of **61** %

Online Assignments	18.53/25	Proctored Exam	42/75
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Total number of candidates certified in this course: 33131

Jul-Oct 2024  
(12 week course)

Indian Institute of Technology Kharagpur

Skill India  
शिक्षण-सिखने का नया रास्ता

Prof. Haimanti Banerji  
Coordinator, NPTEL  
IIT Kharagpur

**swayam**

Roll No: NPTEL24CS1155852807045 To verify the certificate No. of credits recommended: 3 or 4

**Elite**  
**NPTEL ONLINE CERTIFICATION**  
(Funded by the MoE, Govt. of India)

This certificate is awarded to  
**PRANATI BISWAL**  
for successfully completing the course

**Introduction to Internet of Things**

with a consolidated score of **90 %**

Online Assignments	25/25	Proctored Exam	64.5/75
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Total number of candidates certified in this course: 33131

Jul-Oct 2024  
(12 week course)

Indian Institute of Technology Kharagpur

swayam

Roll No: NPTEL24CS115572804344 To verify the certificate No. of credits recommended: 3 or 4

**Elite**  
**NPTEL ONLINE CERTIFICATION**  
(Funded by the MoE, Govt. of India)

This certificate is awarded to  
**SANMATHI Y A**  
for successfully completing the course

**Introduction to Internet of Things**

with a consolidated score of **88 %**

Online Assignments	23.72/25	Proctored Exam	64.5/75
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Total number of candidates certified in this course: 33131

Jul-Oct 2024  
(12 week course)

Indian Institute of Technology Kharagpur

swayam

Roll No: NPTEL24CS1155752806898 To verify the certificate No. of credits recommended: 3 or 4

**Elite**  
**NPTEL ONLINE CERTIFICATION**  
(Funded by the MoE, Govt. of India)

This certificate is awarded to  
**THARUN C E**  
for successfully completing the course

**Introduction to Internet of Things**

with a consolidated score of **75 %**

Online Assignments	25/25	Proctored Exam	49.5/75
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Total number of candidates certified in this course: 33131

Jul-Oct 2024  
(12 week course)

Indian Institute of Technology Kharagpur

swayam

Roll No: NPTEL24CS115576630013 To verify the certificate No. of credits recommended: 3 or 4

**Elite**  
**NPTEL ONLINE CERTIFICATION**  
(Funded by the MoE, Govt. of India)

This certificate is awarded to  
**VARSHINI BALAKRISHNA**  
for successfully completing the course

**Introduction to Internet of Things**

with a consolidated score of **75 %**

Online Assignments	24.56/25	Proctored Exam	50.5/75
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Total number of candidates certified in this course: 33131

Jul-Oct 2024  
(12 week course)

Indian Institute of Technology Kharagpur

swayam

Roll No: NPTEL24CS1155752802022 To verify the certificate No. of credits recommended: 3 or 4

**Elite**  
**NPTEL ONLINE CERTIFICATION**  
(Funded by the MoE, Govt. of India)

This certificate is awarded to  
**ABHINAV SINHA**  
for successfully completing the course

**Introduction to Internet of Things**

with a consolidated score of **87 %**

Online Assignments	22.38/25	Proctored Exam	64.5/75
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Total number of candidates certified in this course: 33131

Jul-Oct 2024  
(12 week course)

Indian Institute of Technology Kharagpur

swayam

Roll No: NPTEL24CS1155852807051 To verify the certificate No. of credits recommended: 3 or 4

**Elite**  
**NPTEL ONLINE CERTIFICATION**  
(Funded by the MoE, Govt. of India)

This certificate is awarded to  
**D JAYANTH**  
for successfully completing the course

**Introduction to Internet of Things**

with a consolidated score of **75 %**

Online Assignments	23.94/25	Proctored Exam	51/75
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Total number of candidates certified in this course: 33131

Jul-Oct 2024  
(12 week course)

Indian Institute of Technology Kharagpur

swayam

Roll No: NPTEL24CS1155852801307 To verify the certificate No. of credits recommended: 3 or 4

**Elite**  
**NPTEL ONLINE CERTIFICATION**  
(Funded by the MoE, Govt. of India)

This certificate is awarded to  
**D GNANA PRASOONA**  
for successfully completing the course

**Introduction to Internet of Things**

with a consolidated score of **80 %**

Online Assignments	24.13/25	Proctored Exam	55.5/75
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Total number of candidates certified in this course: 33131

Jul-Oct 2024  
(12 week course)

Indian Institute of Technology Kharagpur

swayam

Roll No: NPTEL24CS1155852801355 To verify the certificate No. of credits recommended: 3 or 4

**Elite**  
**NPTEL ONLINE CERTIFICATION**  
(Funded by the MoE, Govt. of India)

This certificate is awarded to  
**NISHANT KUMAR DUBEY**  
for successfully completing the course

**Introduction to Internet of Things**

with a consolidated score of **67 %**

Online Assignments	17.91/25	Proctored Exam	49.5/75
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Total number of candidates certified in this course: 33131

Jul-Oct 2024  
(12 week course)

Indian Institute of Technology Kharagpur

swayam

Roll No: NPTEL24CS1155752806188 To verify the certificate No. of credits recommended: 3 or 4

**Elite**  
**NPTEL ONLINE CERTIFICATION**  
(Funded by the MoE, Govt. of India)

This certificate is awarded to  
**RISHAV ADITYA**  
for successfully completing the course

**Introduction to Internet of Things**

with a consolidated score of **79** %

Online Assignments	25/25	Proctored Exam	54/75
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Total number of candidates certified in this course: 33131

Jul-Oct 2024  
(12 week course)

Indian Institute of Technology Kharagpur

swayam

Roll No: NPTEL24CS115572804283 To verify the certificate No. of credits recommended: 3 or 4

**Elite**  
**NPTEL ONLINE CERTIFICATION**  
(Funded by the MoE, Govt. of India)

This certificate is awarded to  
**VISHAL D**  
for successfully completing the course

**Introduction to Internet of Things**

with a consolidated score of **62** %

Online Assignments	24.16/25	Proctored Exam	37.5/75
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Total number of candidates certified in this course: 33131

Jul-Oct 2024  
(12 week course)

Indian Institute of Technology Kharagpur

swayam

Roll No: NPTEL24CS1155852803429 To verify the certificate No. of credits recommended: 3 or 4

**Elite**  
**NPTEL ONLINE CERTIFICATION**  
(Funded by the MoE, Govt. of India)

This certificate is awarded to  
**NANCY SHARMA**  
for successfully completing the course

**Introduction to Internet of Things**

with a consolidated score of **71** %

Online Assignments	21/25	Proctored Exam	49.5/75
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Total number of candidates certified in this course: 33131

Jul-Oct 2024  
(12 week course)

Indian Institute of Technology Kharagpur

swayam

Roll No: NPTEL24CS115572802224 To verify the certificate No. of credits recommended: 3 or 4

**Elite**  
**NPTEL ONLINE CERTIFICATION**  
(Funded by the MoE, Govt. of India)

This certificate is awarded to  
**AHEMAD TALLAWAR**  
for successfully completing the course

**Introduction to Internet of Things**

with a consolidated score of **76** %

Online Assignments	22.47/25	Proctored Exam	54/75
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Total number of candidates certified in this course: 33131

Jul-Oct 2024  
(12 week course)

Indian Institute of Technology Kharagpur

swayam

Roll No: NPTEL24CS1155852807069 To verify the certificate No. of credits recommended: 3 or 4

- Ms. Tanya (ENG21CT0044) of 7th semester CST got selected in Lead Squared Campus Placement Drive organized by Department of Training and Placement on 29th November 2024.



- Ms. Jalaja R (ENG22CT0007), Mr. Pavan Kumar V (ENG22CT0015), Ms. Srushti S (ENG22CT0019), Ms. Vishishta H E (ENG22CT0022), Mr. Ahmed Isa Zaweel (ENG22CT0039), Ms. Akshitha T O (ENG22CT0040), and Ms. Pushyami B (ENG22CT0045) successfully completed the NPTEL online courses “Introduction to Internet of Things” from July to October 2024. (12-week course)

**Elite**  
**NPTEL ONLINE CERTIFICATION**  
 (Funded by the MoE, Govt. of India)

This certificate is awarded to  
**JALAJA R**  
 for successfully completing the course  
**Introduction to Industry 4.0 and Industrial Internet of Things**  
 with a consolidated score of **76 %**  
 Online Assignments **23.5/25** | Proctored Exam **52.5/75**  
 Total number of candidates certified in this course: **15725**

Jul-Oct 2024  
 (12 week course)

Indian Institute of Technology Kharagpur

Swayam

Roll No: NPTEL24C99545280741 To verify the certificate No. of credits recommended: 3 or 4

**Elite**  
**NPTEL ONLINE CERTIFICATION**  
 (Funded by the MoE, Govt. of India)

This certificate is awarded to  
**PAVAN KUMAR V**  
 for successfully completing the course  
**Introduction to Industry 4.0 and Industrial Internet of Things**  
 with a consolidated score of **75 %**  
 Online Assignments **24.56/25** | Proctored Exam **50.5/75**  
 Total number of candidates certified in this course: **15725**

Jul-Oct 2024  
 (12 week course)

Indian Institute of Technology Kharagpur

Swayam

Roll No: NPTEL24C995452802276 To verify the certificate No. of credits recommended: 3 or 4

**Elite**  
**NPTEL ONLINE CERTIFICATION**  
 (Funded by the MoE, Govt. of India)

This certificate is awarded to  
**SRUSHTI S**  
 for successfully completing the course  
**Introduction to Industry 4.0 and Industrial Internet of Things**  
 with a consolidated score of **72 %**  
 Online Assignments **24.35/25** | Proctored Exam **48/75**  
 Total number of candidates certified in this course: **15725**

Jul-Oct 2024  
 (12 week course)

Indian Institute of Technology Kharagpur

Swayam

Roll No: NPTEL24C995452809891 To verify the certificate No. of credits recommended: 3 or 4

**Elite**  
**NPTEL ONLINE CERTIFICATION**  
 (Funded by the MoE, Govt. of India)

This certificate is awarded to  
**VISHISHTA H E**  
 for successfully completing the course  
**Introduction to Industry 4.0 and Industrial Internet of Things**  
 with a consolidated score of **73 %**  
 Online Assignments **25/25** | Proctored Exam **48/75**  
 Total number of candidates certified in this course: **15725**

Jul-Oct 2024  
 (12 week course)

Indian Institute of Technology Kharagpur

Swayam

Roll No: NPTEL24C995452803818 To verify the certificate No. of credits recommended: 3 or 4

**Elite**  
**NPTEL ONLINE CERTIFICATION**  
 (Funded by the MoE, Govt. of India)

This certificate is awarded to  
**AHMED ISA ZAWHEEL**  
 for successfully completing the course  
**Introduction to Industry 4.0 and Industrial Internet of Things**  
 with a consolidated score of **76 %**  
 Online Assignments **25/25** | Proctored Exam **51/75**  
 Total number of candidates certified in this course: **15725**

Jul-Oct 2024  
 (12 week course)

Indian Institute of Technology Kharagpur

Swayam

Roll No: NPTEL24C995452807624 To verify the certificate No. of credits recommended: 3 or 4

**Elite**  
**NPTEL ONLINE CERTIFICATION**  
 (Funded by the MoE, Govt. of India)

This certificate is awarded to  
**AKSHITHA T O**  
 for successfully completing the course  
**Introduction to Industry 4.0 and Industrial Internet of Things**  
 with a consolidated score of **71 %**  
 Online Assignments **23.13/25** | Proctored Exam **48/75**  
 Total number of candidates certified in this course: **15725**

Jul-Oct 2024  
 (12 week course)

Indian Institute of Technology Kharagpur

Swayam

Roll No: NPTEL24C995452807177 To verify the certificate No. of credits recommended: 3 or 4

**Elite**  
**NPTEL ONLINE CERTIFICATION**  
 (Funded by the MoE, Govt. of India)

This certificate is awarded to  
**PUSHYAMI B**  
 for successfully completing the course  
**Introduction to Industry 4.0 and Industrial Internet of Things**  
 with a consolidated score of **64 %**  
 Online Assignments **25/25** | Proctored Exam **39/75**  
 Total number of candidates certified in this course: **15725**

Jul-Oct 2024  
 (12 week course)

Indian Institute of Technology Kharagpur

Swayam

Roll No: NPTEL24C995452806174 To verify the certificate No. of credits recommended: 3 or 4

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Department of CST, DSU.



# SCHOOL OF ENGINEERING

Devarakaggalahalli, Harohalli, Kanakpura Road,  
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