



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

Lecture series on Artificial Intelligence and the Future of Human-Computer Interaction

The Department of Computer Science and Engineering and the Department of International Affairs jointly organized an enlightening lecture series titled “Artificial Intelligence and the Future of Human-Computer Interaction”. The event, held under the Scholar in Residence Programme, featured Dr. Kenneth Arthur Rouse from LeTourneau University, USA, from December 9 to 14, 2024. Dr. Rouse commenced his stay with a warm meet-and-greet session, followed by a keen observation of our lecture halls and interactions with faculty. Over the course of the week, he delivered engaging lectures on diverse topics such as Red-Black Trees, Artificial Intelligence (AI), and Human-Computer Interaction (HCI), tailored to meet the needs of different academic levels.

The session on Red Black Trees was particularly well-received by students in the 3rd semester, where Dr. Rouse provided an in-depth exploration of this fundamental data structure. For senior students in the 5th semester, he conducted interactive sessions on AI and HCI, offering insights into the future of these transformative fields.

In addition, Dr. Rouse hosted a special guest lecture exclusively for faculty and advanced students, where he discussed cutting-edge developments in HCI and its interdisciplinary applications. His presentations sparked meaningful discussions and inspired future research collaborations.

DAYANANDA SAGAR UNIVERSITY **SCHOOL OF ENGINEERING** **INSTITUTION'S INNOVATION COUNCIL** **LETOURNEAU UNIVERSITY**

Dayananda Sagar University, Main Campus, Devarakaggalahalli, Harohalli,
Kanakapura Road, Ramanagara Dt., Bengaluru – 562 112

Jointly Organized by
Department of Computer Science & Engineering
and
Department of International Affairs

Scholar in Residence Programme

Lecture series on Artificial Intelligence and the Future of Human-Computer Interaction

Dates: 9/12/2024 to 14/12/2024
Venue: School of Engineering, DSU

Dr. KENNETH ARTHUR ROUSE
LeTourneau University, USA





SCHOOL OF ENGINEERING



WORKSHOPS / SKILL DEVELOPMENT PROGRAMS

Workshop on “Connect Next - 3D Experience”

The "Connect Next - 3D Experience Workshop" was organized by Dassault Systems from December 19th to 21st, 2023, at their PRAMUKH office. This workshop aimed to provide students with an exceptional opportunity to enhance their skills and gain hands-on experience with cutting-edge 3D design and engineering tools. The core topics focused on the functioning, mechanical design, and avionics of model rockets, sounding rockets, high-powered rockets, and CANSAT systems. The workshop was conducted over three days, with each day focusing on specific aspects of rocket design and technology: The workshop began with a session on design thinking, providing participants with a structured approach to innovative problem-solving. This was followed by an introduction to the functioning and principles of rockets, laying a strong foundation for the subsequent sessions. Topics covered on the second day included: Rocket Mechanical Design: Understanding the structural design of rockets. Rocket Motor: Insights into propulsion systems and motor design. Avionics: Detailed exploration of avionics systems for both rockets and CANSAT systems.



Thirty Hours Value Added Course on "AI and ML in Nursing & Healthcare"

The rapid advancements in Artificial Intelligence (AI) and Machine Learning (ML) are transforming industries, with healthcare being one of the most impacted domains. The integration of AI and ML in nursing and healthcare has opened up avenues for improved diagnostics, personalized treatment, operational efficiency, and patient engagement. Recognizing this potential, a 30-hour hands-on training program was conducted from 26th October 2024 to 27th November 2024, from 6:00 PM to 7:00 PM in Hybrid Mode.

The program, led by Dr. Shaila SG and Prof. Sindhu A from the Department of CSE (Data Science), with coordination by Dr. Jamuna P, School of Nursing aimed to equip participants with foundational and advanced knowledge in AI and ML applications tailored for nursing and healthcare. This course provided participants with insights into machine learning models, neural networks, data analytics, and the Internet of Things (IoT), along with practical examples and case studies to emphasize the impact of AI in healthcare. The training program offered a robust platform to explore AI and ML in the context of nursing and healthcare, emphasizing practical implementation and future trends. It empowered participants with technical expertise and industry-relevant skills, preparing them for innovations in healthcare technology.

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SCHOOL OF ENGINEERING

School of Engineering
DAYANANDA SAGAR UNIVERSITY
Devarakagalli, Harohalli, Kanakapura Road
Ramanagar Dt., Bengaluru-562112

COLLEGE OF NURSING SCIENCES
DAYANANDA SAGAR UNIVERSITY, Harohalli
Devarakagalli, Harohalli, Kanakapura Road
Ramanagar Dt., Bengaluru-562112

Programme Objectives
The objective of this program is to equip participants with foundational knowledge and practical skills in AI and machine learning, enabling them to apply advanced technologies such as neural networks, data analytics, and IoT in nursing and healthcare, ultimately enhancing patient care, operational efficiency, and decision-making through data-driven innovations.

Coordinated by:

- Dr. Jamuna P. P., Associate Professor, College of Nursing Sciences, DSU.
- Student coordinator: Mrs. Julice Varughese.

Resource Persons

Dr. Shaila S G
Professor & Chairperson
CSE(Data Science)

Prof. Sindhu A
Assistant Professor
CSE(Data Science)

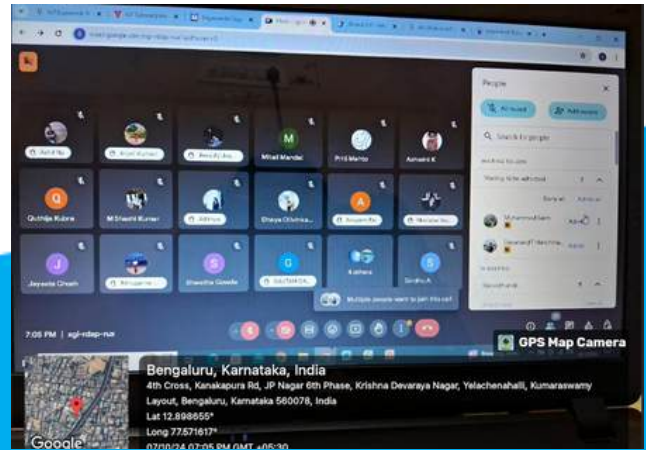
Transforming Nursing and Healthcare Through AI: Insights, Innovations, and Future Trends

A-Block A411 is available both of offline and online.

October 26, 2023 - November 27, 2024
Time: 6:00 PM - 7:00 PM

Agenda

Unit No.	Course Content (Topics and Subtopics)	Hours
1	Introduction to AI and ML: Importance and Applications in Nursing & Healthcare	3
2	Types of ML & Classification: Decision Tree, Bayesian Classifier, Regression	2
3	Neural Networks: Learning Models, Deep Neural Networks, CNNs, RNNs, NLP, Computer Vision	4
4	Internet of Things (IoT): Introduction, Process Flow, Tools, Use Cases, Remote Patient Monitoring	3
5	Data Representation: Introduction, Data Frames, Standardization, Handling Noise/Missing Values, Transformation	4
6	Data Analytics: Tools like R, Python, Statistical and Visualization Tools	4
7	Healthcare Data Analysis: Sources, Pre-processing, Handling, Analysis-ready Datasets	5
8	Healthcare Datasets: Examples and Case Studies	3
9	Case Studies and Future Trends in AI Healthcare	2



"Mastering Machine Learning: A Comprehensive Hands-On Bootcamp"

The Department of Computer Science and Technology recently organized a highly successful event titled "Mastering Machine Learning: A Comprehensive Hands-On Bootcamp" from 12th to 16th December 2024 for 5th-semester students. Led by Mr. Dinesh Yuvaraj, an AI Developer renowned for his expertise in fine-tuning language models and developing AI chatbots, the boot camp provided participants with a robust foundation in machine learning and artificial intelligence. The program blended theoretical knowledge with practical applications, covering topics such as building language models, chatbots, neural networks, boosting algorithms, and the Random Forest method. The hands-on training sessions allowed students to implement these techniques and understand their real-world applications. The boot camp concluded with participants feeling confident and equipped with the skills to apply machine learning in practical scenarios, laying a strong foundation for further exploration or career advancement in AI and data science.

DAYANANDA SAGAR UNIVERSITY **DEPARTMENT OF COMPUTER SCIENCE AND TECHNOLOGY** **SCHOOL OF ENGINEERING**

ORGANIZES:

MASTERING MACHINE LEARNING: A COMPREHENSIVE HANDS-ON BOOTCAMP

OBJECTIVE:

To provide participants with a solid foundation in machine learning and artificial intelligence through a blend of theoretical insights and hands-on activities. Attendees will gain experience in building, deploying, and interpreting machine learning models, explore modern AI applications, and learn cutting-edge tools and techniques, while addressing ethical and practical considerations in AI implementation.

OUTCOME:

By the end of the bootcamp, participants will have the confidence and skills to leverage machine learning in real-world applications, equipping them for further exploration or career advancement in AI and data science.

MR. DINESH YUVARAJ

Mr. Dinesh Yuvaraj is an AI Developer specializing in innovative AI solutions that optimize business processes and data-driven decisions. With expertise in fine-tuning language models, developing AI chatbots, and advancing machine learning projects, he leads AI initiatives to deliver impactful results and shape the future of artificial intelligence.

THE EVENT WILL BE HELD ON:

Thursday, 12 December, 2024
Friday, 15 December, 2024
Monday, 16 December, 2024
Venue: A327

COVENER

Dr. Udaya Kumar Reddy KR
Dean- School of Engineering

Dr. M Shahina Parveen
Chairperson, CST

ORGANIZER

Dr. Sudha D
Associate Professor, CST

Prof. Ramandeep Kaur
Assistant Professor, CST

Transforming Insights into Impact through Machine Learning Mastery!





SCHOOL OF ENGINEERING



WEBINARS / SEMINARS / TECHNICAL TALKS

Expert Talk on “Computational Fluid Dynamics (CFD) Approach for Convection Heat Transfer Problems”

An invited talk on “Computational Fluid Dynamics (CFD) Approach for Convection Heat Transfer Problems” was delivered by Dr. Ningegowda B. M., Associate Professor in the Department of Mechanical Engineering at Dayananda Sagar College of Engineering. Dr. Ningegowda commenced the session with an introduction to the fundamentals of CFD, discussing its scope, importance, and applications in modern engineering challenges. The talk was closely aligned with the CFD syllabus for the participating semesters, covering essential topics such as numerical methods, the Finite Difference Method, and solving Navier-Stokes equations. He also explained practical approaches to conduction and convection heat transfer problems, ensuring students gained insights into both theoretical and computational aspects of CFD. The session was highly engaging and appreciated by students and faculty alike. Dr. Nugegoda’s ability to simplify complex concepts and relate them to real-world applications made the talk informative and impactful.



Expert-talk on “Smart Choices: Essential Tips for Selecting Universities Worldwide for Higher Studies”

On 10th December 2024, the Department of Computer Science & Engineering (AI & ML) conducted an expert talk on “Smart Choices: Essential Tips for Selecting Universities Worldwide for Higher Studies”, for 3rd semester students. Arham Asif Syed, an alumnus (2020-2024), Dept. of CSE(AI&ML) of Dayananda Sagar University and a current Master's student in Artificial Intelligence at the University of Technology Sydney, Australia, shares essential tips for selecting universities for higher studies. When choosing a study destination, the USA and Canada offer unique advantages. The USA is renowned for its world-class education, featuring top universities like MIT and Harvard, advanced curriculums, cutting-edge research, and excellent job prospects in industries like technology and healthcare. Scholarships and financial aid make it accessible for talented students. Canada, on the other hand, offers high-quality, affordable education at institutions like the University of Toronto and McGill. It provides clear pathways to post-graduation work and permanent residence (PR), affordable living costs, and universal healthcare. Both countries offer exceptional opportunities, but preferences depend on career goals and budget.

DAYANANDA SAGAR UNIVERSITY
DEVARAHAGGAH KALLI HAROHALLI, NANAKAPURA RD, DIST RAMANAGARA, KARNATAKA - 562112

SCHOOL OF ENGINEERING

DEPARTMENT OF ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING
ORGANISING

9:00 am to 10:30 am
lecture hall 3 & 4
10th December 2024

"SMART CHOICES: ESSENTIAL TIPS FOR SELECTING UNIVERSITIES WORLDWIDE FOR HIGHER STUDIES"

Arham Asif Syed,
Alumni (Batch: 2020-2024)
CSE(AI&ML) Dept,
MASTERS of ARTIFICIAL INTELLIGENCE
UNIVERSITY OF TECHNOLOGY SYDNEY
(UTS), AUSTRALIA

Join us for an insightful talk by Mr. Arham Asif Syed on "Smart Choices: Essential Tips for Selecting Universities Worldwide for Higher Studies" for 3rd Sem AI-ML students, on 10th Dec, 9:00-10:30 AM.
Gain valuable tips on smart choices to select Universities!

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Roopa Priya J K
Placement Officer
Supriya Mathew
Vice President- International Affairs

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DR. G NAVEEN BABU, ASSOCIATE DEAN, SOE

CONVENERS
DR JAYAVRINDA VRINDAVANAH, CHAIRPERSON, CSE (AI&ML), DSU



Expert Talk on “Effective Strategies to Excel in Gate Exam for Higher Education”

On 12th December 2024, the Department of Computer Science & Engineering (AI & ML) conducted an expert talk on “Smart Choices: Essential Tips for Selecting Universities Worldwide for Higher Studies”, for 3rd semester students. Mr. Pramod Koushik T R, an alumnus (2020-2024) of CSE (AIML) and a Master's student in Data Science at SVNIT Surat, shared strategies to excel in the GATE exam and insights on career paths post-BTech. He highlighted opportunities in PSUs (e.g., Maharatna, Navratna), private sectors, and higher education options like MBA, MTech, or MS at reputed institutes. For GATE, he recommended focusing on CS and Mathematics (85 marks) and Aptitude (15 marks), using resources like textbooks, mock tests, and materials from experts. He emphasized the benefits of these paths, including financial gains, learning, diverse exposure, and the fulfillment of career aspirations.

DAYANANDA SAGAR UNIVERSITY
DEPARTMENT OF ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING ORGANISING

"EFFECTIVE STRATEGIES TO EXCEL IN THE GATE EXAM FOR HIGHER EDUCATION"

1.50 am to 3:00 pm
Lecture hall 1 & 3
12th December 2024

Pramod Koushik T.R.
Alumni (Batch: 2020-2024)
CSE(AI&ML) Dept,
MASTERS IN DATA SCIENCE
SARDAR VALLABHBHAI NATIONAL
INSTITUTE OF TECHNOLOGY,
SURAT

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CONVENERS
DR. JAYAVINDA VRINDAVANAM, CHAIRPERSON, CSE (AI&ML), DSU

Join us for an insightful talk by Pramod Koushik T.R on "Effective Strategies to Excel in the GATE Exam for Higher Education" for 3rd Sem AI-ML students, on 12th Dec, 1:50-3:00 PM.
Gain valuable tips to clear GATE Exams!



Expert Talk on “AI solutions for healthcare 4.0”

On 13th December 2024, the Department of Computer Science & Engineering (AI & ML) conducted an expert talk on “AI solutions for healthcare 4.0” for 5th Semester AI&ML Students. Dr. Sulaxan Shankar Jadhav, Adjunct Faculty at Symbiosis School of Economics, explores the role of AI in transforming Healthcare 4.0. He highlights AI-driven diagnostics, predictive analytics, personalized medicine, and real-time health monitoring through smart wearables. By integrating AI with IoT, big data, and robotics, healthcare ecosystems can become more efficient and intelligent. Dr. Jadhav also addresses key challenges, including data privacy, ethical concerns, and regulatory frameworks, emphasizing the need for responsible AI adoption to improve patient outcomes and healthcare efficiency.

The poster is purple and white with a circular portrait of Dr. Sulaxan Shankar Jadhav on the left. It features the university logo and name at the top, the department name, and the event title in large green letters. It lists the date, time, and location, and includes a list of chief patrons, patrons, and conveners.

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DEVARAKOGGAHALLI, HAROHALLI, KANAKAPURA RD, DIST RAMANAGARA, KARNATAKA - 562112

SCHOOL OF ENGINEERING

9.30 am to 10:30 pm
lecture hall 1
13th December 2024

DEPARTMENT OF ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING
ORGANISING

“AI SOLUTIONS FOR HEALTH CARE 4.0”

Dr Sulaxan Shankar Jadhav
Adjunct Faculty in Symbiosis School of Economics

Join us for an insightful talk by Dr Sulaxan Shankar Jadhav on “AI solutions for Health Care 4.0” for 7th Sem AI-ML students, on 13th Dec, 9.30-10.30 AM.
Gain valuable Insight of AI in Healthcare

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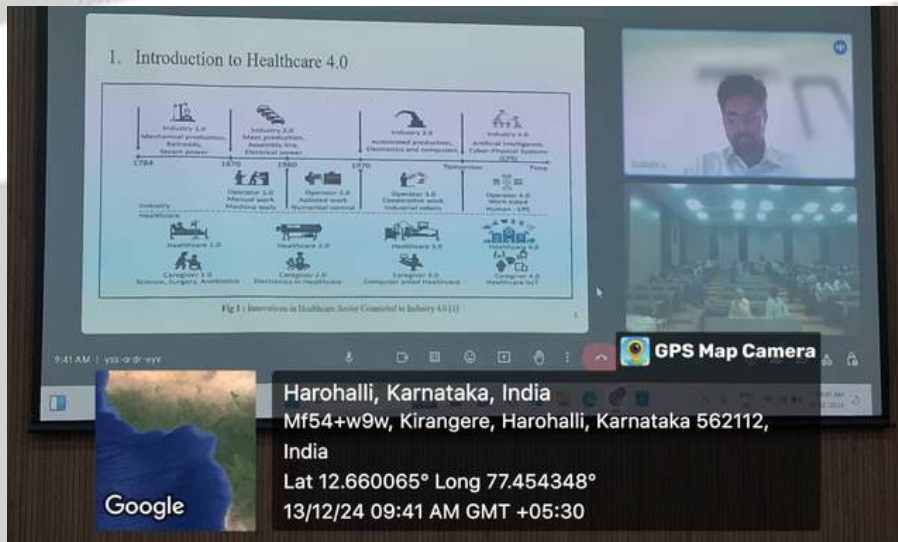
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CONVENERS
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Ramanagara, Karnataka, India
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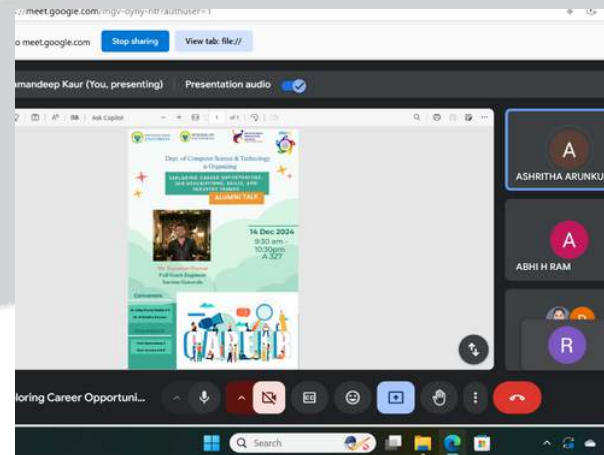
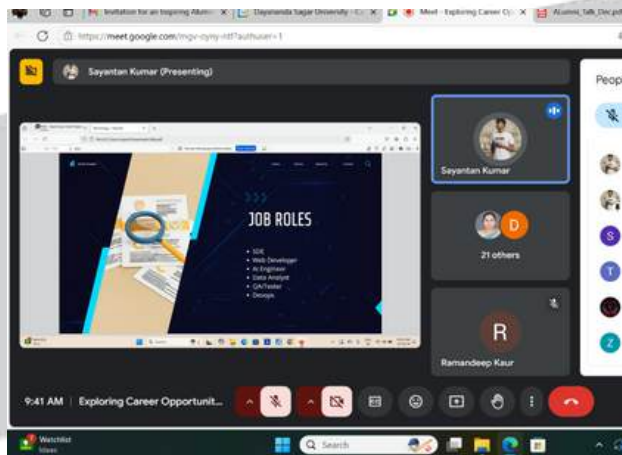
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“Alumni Talk on Exploring Career Opportunities: Job Descriptions, Skills, and Industry Trends”

The Department of Computer Science & Technology are delighted to share the success of our recent alumni talk titled "Exploring Career Opportunities: Job Descriptions, Skills, and Industry Trends." The event, held on 14 December 2024, was a resounding success, providing valuable insights and guidance to our students.



Peer to Peer Learning – “Idea Pitch”

Peer learning which is a powerful method for mutual growth and development, especially in educational was conducted with 5th Sem students of CST on 13/12/2024 at A325, which focused on leveraging group discussions and collaborative insights to build practical skills. This initiative targets students and young professionals looking to improve their problem-solving abilities, leadership skills, and teamwork through a structured peer-learning environment. Innovative peer-learning initiative, combines the joys of reading with skill enhancement. Through structured discussions and practical activities, participants gained valuable skills and forge meaningful connections. We invite stakeholders to support this initiative and help create a thriving learning community.





SCHOOL OF ENGINEERING



EVENTS: PROFESSIONAL SOCIETIES / CLUB ACTIVITIES

“Make your own telescope”

The Alatus Aerospace club organized an event titled “Make your own telescope” on 13/12/24 at the Department of Aerospace Engineering at Dayananda Sagar University. The students from 1st, 2nd, and 3rd years actively participated and constructed their own telescope. The main objective of this activity was to build a telescope and to perform the stargazing activity. This activity was initiated by Alatus aerospace club members and the faculty coordinator Prof Sripad and other faculties from the department.



'Keychain Chronicles' by The Literary Society

The Literary Society, SOE, organized a competition, 'Keychain Chronicles,' on 26-12-2024 on the first floor from 3 pm to 4:30 pm. We received 56 enthusiastic participants throughout all semesters. They were given wooden keychain blanks, charms, and painting supplies and were instructed to draw and compose quotes associated with their paintings. The purpose of painting and creating quotes was to help students express themselves creatively, reduce stress, and enhance their communication abilities. While quotes aid in efficiently communicating vision and principles, whether in speeches or writing, art can highlight creativity, invention, and the transforming potential of unusual thought. Art nurtures creative thinking by presenting new perspectives and ideas and is often used in an open-ended nature that fosters problem-solving and intellectual engagement. Overall, art & quotes are tools for inspiring change, connecting with others, and leaving a lasting impact. Whether used in writing, public speaking, or branding, original quotes hold the power to transform thoughts and actions.

This activity was intentionally chosen to help students cope with exam pressure, and it was a great success.



Industry Connect Session with Oppo

The Generation Green (Gen G) Campaign, an initiative by OPPO India in collaboration with AICTE and managed by 1M1B, was successfully organized on 10th December 2024. The event featured a vibrant cultural segment with a flash mob, skit, and fashion show, followed by activities like a scavenger hunt, ideathon, and face painting. Distinguished guests, including Syed Khaja Mohiddin M.E - Senior Environmental Officer, KSPCB, and Ms. Anuka Kumar - Head of CSR, OPPO India, graced the inauguration. Esteemed speakers, including the Vice Chancellor and Associate Dean - Dr. Naveen Babu, emphasized the importance of sustainability and innovation. Post lunch, the event continued with a roundtable discussion where the dean sir, chairpersons of all departments, and faculty members shared their ideas on sustainability. They engaged in collaborative discussions with Mr. Syed Khaja Mohiddin M.E. and Ms. Anuka Kumar. During the session, an MoU was signed to promote collaboration in research, organize awareness campaigns, and support initiatives for startups. The MoU between Oppo and 1M1B will enhance innovation and startup opportunities for DSU students. Additionally, the Government of Karnataka's commitment to support and fund projects from the School of Engineering will provide valuable resources for growth and research, fostering a thriving entrepreneurial ecosystem at DSU.



TECHSPARK MATLAB EXPO 2024

The DataScience@DSU Club, the Department of CSE (Data Science) & IEEE student Chapter-Information Theory Society organized TECHSPARK MATLAB EXPO 2024 held on 24th December 2024, from 10:00 AM to 03:00 PM in A410, SOE, DSU organized Dr. Shaila S G, Professor and Chairperson (DS), Prof. Shivamma D, Assistant Professor, Dept. of CSE (Data Science), and Prof. Monish L, Assistant Professor, Dept. of CSE (Data Science). More than 50+ students have registered and participated in the event.

The resource persons officially inaugurated the MATLAB EXPO at DSU, marking the beginning of the event. The program commenced with a warm welcome to the experts, followed by addresses from the dignitaries, who spoke to the assembled audience. The event concluded with students enthusiastically participating in and enjoying their MATLAB learning experience.

The primary objective is to inspire creativity by showcasing how MATLAB can be used to develop future-ready solutions and enhance productivity in academic and industrial applications.

DAYANANDA SAGAR UNIVERSITY | **MathWorks** | **INSTITUTION'S INNOVATION COUNCIL** | **CoreEL Technologies**

School of Engineering
Devarakagalahalli, Harohalli, Kanakapura Road
Ramanagara DT., Bengaluru - 562 112

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING (DATA SCIENCE)
In association with **IEEE ITS, MathWorks & CoreEL Technologies**
Is Organising

TECHSPARK MATLAB EXPO 2024

Date: 24TH DEC 2024 @ 10:00 am to 3:00 pm

Venue: 4410, A Block, Harohalli, DSU

Experts:

- Dr. Debanand Singdeo, Senior Engineer, Education Team at MathWorks
- Mr. Rakshith B S, Senior Application Engineer for MathWorks CoreEL Technologies

Organizers:

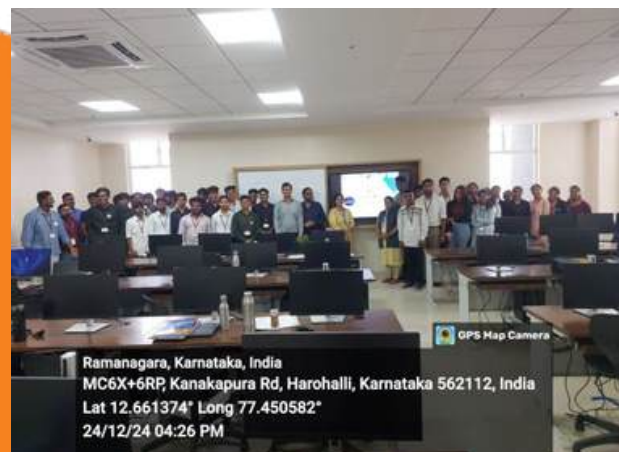
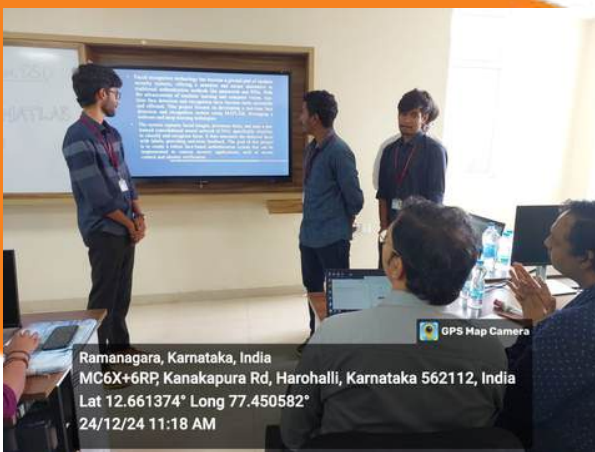
- Prof. Shivamma D, Assistant Professor
- Prof. Monish L, Assistant Professor, Dept. of CSE(DS)

Student Co-ordinators:

- Nitin Prajwal R, Jaardhan K S, Pavan Kumar

CONVOCERS:

- Dr. Anir Bhatt, Vice-Chancellor, DSU
- Dr. Udaya Kumar Reddy KR, Dean, SOE
- Dr. Naven Babu, Assoc. Dean, SOE
- Dr. Shaila S G, Chairperson, Dept. of CSE (DS)



“Educational Outreach Program”

On 19th December 2024 the Alatus Aerospace Club, under the Department of Aerospace Engineering at DSU, organized an engaging and educational interactive session on health and hygiene for the students of the government school in Kiranagere, Harohalli. The event featured fun activities, including interactive "germ finder" games designed to teach students the importance of hygiene in a playful way, along with hands-on activities to promote better health practices. Additionally, students enjoyed a paper plane-making activity, combining creativity and learning. The session aimed to foster awareness and inspire healthy habits while encouraging curiosity and teamwork among the students.



Grand Launch of the IEEE CEDA Student Branch Chapter at Dayananda Sagar University

The Department of Electronics and Communication Engineering is delighted to announce the successful inauguration of the IEEE Council on Electronic Design Automation (CEDA) Student Branch Chapter at Dayananda Sagar University (DSU). This momentous event marked the beginning of a new journey toward fostering innovation, collaboration, and excellence in the field of Electronic Design Automation (EDA).

The inauguration ceremony witnessed the presence of esteemed dignitaries, including Dr. Parameshachari B D, Dr. Shashidhara K S, Dr. Pushpa Mala S, and Dr. Arun Balodi, who shared their profound knowledge and inspired the audience with insights into emerging trends and opportunities in EDA and related domains.

Under the guidance of Dr. Arun Balodi, Chairperson and Professor, Department of Electronics and Communication Engineering, and the dynamic leadership of Deekshitha R, Chair, the chapter comprises a vibrant team of passionate and talented members ready to make an impactful contribution to the technical community.

The launch event was filled with enthusiasm as students actively engaged in discussions, learned about the chapter's vision, and began exploring opportunities to collaborate and grow. The chapter is committed to promoting academic and professional growth by organizing technical talks, workshops, and competitions to benefit the DSU community.







SCHOOL OF ENGINEERING



FACULTY ACHIEVEMENTS



Dr. Suryanarayana G.K
Professor
Department of Aerospace Engineering

- Dr. Suryanarayana G.K., Professor in the Department of Aerospace Engineering, and Mr. Mohammed Amin, also from the Department of Aerospace Engineering, have published a patent on a Nano Air Vehicle designed for low-altitude, low-speed flying.

The Patent Office Journal No. 49/2024 Dated 06/12/2024 114937

(12) PATENT APPLICATION PUBLICATION (21) Application No.202441071108 A

(19) INDIA (43) Publication Date : 06/12/2024

(22) Date of filing of Application :20/09/2024

(54) Title of the invention : NANO-AIR VEHICLE FOR LOW-ALTITUDE LOW-SPEED FLYING

<p>(51) International classification :B64C0023060000, B64C0039020000, B64U0050190000, G06V0040160000, G05D0001000000</p> <p>(86) International Application No :NA Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : 1)Dayananda Sagar University Address of Applicant :Devarakaggalahalli, Harohalli, Kanakapura Road , Ramnagara District - 562 112, Karnataka, India. ----- Name of Applicant : NA Address of Applicant : NA</p> <p>(72)Name of Inventor : 1)Suryanarayana G K Address of Applicant :# 642,10th B Main Road, 4th Block Jayanagar,Bengaluru-560011, Karnataka, India Bengaluru ----- 2)Mohammed Amin Address of Applicant :#423 Prasad Nivas, 3rd cross. behind hp petrol pump,Chikkamannaahalli, Mathikere,Bengaluru-560054, Karnataka,India Bengaluru -----</p>
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(57) Abstract :
 5 A flying apparatus comprising a vortex generator (112) located at the head region (102) creates controlled vortices in the airflow over the non-flapping wings (110), delaying flow separation and increasing lift. Positioned downstream of the vortex generator, a lifting surface (114) interacts with the vortices to further enhance the lift-to-drag ratio, improving performance during low-speed flight. The present disclosure also relates to a method (200) 10 includes activating the motors (202), adjusting the rudder (204), generating vortices (206), interacting with the lifting surface (208), and dynamically adjusting lift (210), while monitoring performance (212). <>

No. of Pages : 26 No. of Claims : 8



Dr. Naresh P
Assistant Professor
Department of CSE

- Dr. Naresh P, Assistant Professor, Department of CSE has successfully completed a free online course on “Python Fundamentals for Beginners” in December 2024 provided by Great Learning Academy.



- Dr. Naresh P, Assistant Professor, Department of CSE has successfully Published a Book titled, “Blockchain Essentials: From Cryptocurrencies to Smart Contracts”, as a Co-Author on 2nd December 2024 and the publisher is Amazon Kindle with the ISBN-13, 979-8346928232.

Books › Education & Teaching › Schools & Teaching



Blockchain Essentials: From Cryptocurrencies to Smart Contracts,

by Mr Suyash Agrawal . (Author), Mr Koushik Reddy Chaganti (Author), Dr M.I. Thariq Hussan (Author), Dr Pannangi Naresh . (Author)

[See all formats and editions](#)

Blockchain Essentials: From Cryptocurrencies to Smart Contracts provides a comprehensive introduction to blockchain technology, covering its foundational principles, architecture, and real-world applications. It begins with an exploration of blockchain's role in powering cryptocurrencies like Bitcoin and Ethereum, explaining cryptographic concepts, consensus mechanisms, and decentralized ledgers. The textbook then expands into the broader uses of blockchain, detailing how smart contracts, decentralized applications (dApps), and tokenization are revolutionizing industries such as finance, supply chain, and healthcare. Emphasizing security, scalability, and regulatory considerations, the book equips readers with the knowledge needed to understand blockchain's potential, challenges, and future developments, making it suitable for both beginners and those with a technical background.

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ISBN-13	Publication date	Language	Dimensions	Print length
 979-8346928232	 December 2, 2024	 English	 6 x 0.48 x 9 inches	 210 pages 

- Dr. Naresh P, Assistant Professor, Department of CSE has successfully presented the paper titled “Self-Optimizing Distributed Cloud Computing with Dynamic Neural Resource Allocation and Fault-Tolerant Multi-Agent Systems” and “Utilizing Machine Learning for the Identification of Chronic Heart Failure (CHF) from Heart Pulsations“ in the 4th IEEE International Conference on Ubiquitous Computing and Intelligent Information Systems (ICUIS-2024) organized by Shree Venkateshwara Hi-Tech Engineering College, Gobichettipalayam, Erode, Tamil Nadu, India during 12-13 December 2024.





Dr. Sivananda Reddy L
Associate Professor
Department of CSE

- Dr. Sivananda Reddy L, Associate Professor, Department of CSE successfully published an Indian patent with the title “Wireless body area network for real-time oxygen saturation monitoring in biomedical applications” on 6th November 2024 with Application No.202441092155 A.

PT 894
D/140599 (26/11/24)

FORM 1 THE PATENTS ACT 1970 (39 of 1970) and THE PATENTS RULES, 2003 APPLICATION FOR GRANT OF PATENT (See section 7, 54 and 135 and sub-rule (1) of rule 20)		(FOR OFFICE USE ONLY) 710085862	
Application No.		202441092155	
Filing date:		26-11-2024	
Amount of Fee paid:		1750/-	
CBR No:		71230	
Signature:			
1. APPLICANT'S REFERENCE / IDENTIFICATION NO. (AS ALLOTTED BY OFFICE) 202441092155			
2. TYPE OF APPLICATION [Please tick (✓) at the appropriate category]			
Ordinary (✓)		Convention ()	PCT-NP ()
Divisional ()	Patent of Addition ()	Divisional ()	Patent of Addition ()
3A. APPLICANT(S)			
Name in Full		Nationality	Country of Residence
Dr. SIVANANDA LAHARI REDDY, ELICHERLA		INDIAN	INDIA
House No.		Address of the Applicant	
		Associate Professor, Department of Computer Science and Engineering, Dayananda Sagar University	
Street			
MAK-164, Flat #302, Srinivasa Gardens Layout, Bagalur Main Road, Sathnur Village			
City			
Bengaluru			
State			
Karnataka			
Country			
India			
Pin code			
562 149			
Name in Full		Nationality	Country of Residence
PAPANI SRINIVAS		INDIAN	INDIA
House No.		Address of the Applicant	
		Assistant Professor, Department of Electronics and Instrumentation Engineering, Vignana	

1

PATENT OFFICE CHENNAI 20/11/2024 10:37

26-Nov-2024/140599/202441092155/Form 1

(1) Patent Application Publication No. (IP No.)	(2) Date of filing of Application 24/11/2024	(3) Application No. 202441092155 A	(4) Publication Date 06/12/2024
(5) Title of the invention: WIRELESS BODY AREA NETWORK FOR REAL TIME OXYGEN SATURATION MONITORING IN BIOMEDICAL APPLICATIONS			
(1) Name of Applicant DR. SIVANANDA LAHARI REDDY ELICHERLA Address of Applicant: Associate Professor, Department of Computer Science and Engineering, Dayananda Sagar University, MAK-164, Flat #302, Srinivasa Gardens Layout, Bagalur Main Road, Sathnur Village, Bengaluru-562149		(2) Name of Inventor: DR. SIVANANDA LAHARI REDDY ELICHERLA Address of Applicant: Associate Professor, Department of Computer Science and Engineering, Dayananda Sagar University, MAK-164, Flat #302, Srinivasa Gardens Layout, Bagalur Main Road, Sathnur Village, Bengaluru-562149	
(3) Name of Applicant: PAPANI SRINIVAS Address of Applicant: Associate Professor, Department of Electronics and Instrumentation Engineering, Vignana Institute of Technology and Science, Devalanki (V), Pothanahally (M), Yaladi Bhojanagara District, Bengaluru-562124		(4) Name of Applicant: SRINIVAS SRINIVAS Address of Applicant: Associate Professor, Department of Electronics and Instrumentation Engineering, Vignana Institute of Technology and Science, Devalanki (V), Pothanahally (M), Yaladi Bhojanagara District, Bengaluru-562124	
(5) Name of Applicant: SRINIVAS SRINIVAS Address of Applicant: Associate Professor, Department of Electronics and Instrumentation Engineering, Vignana Institute of Technology and Science, Devalanki (V), Pothanahally (M), Yaladi Bhojanagara District, Bengaluru-562124		(6) Name of Applicant: SRINIVAS SRINIVAS Address of Applicant: Associate Professor, Department of Electronics and Instrumentation Engineering, Vignana Institute of Technology and Science, Devalanki (V), Pothanahally (M), Yaladi Bhojanagara District, Bengaluru-562124	
(7) Name of Applicant: SRINIVAS SRINIVAS Address of Applicant: Associate Professor, Department of Electronics and Instrumentation Engineering, Vignana Institute of Technology and Science, Devalanki (V), Pothanahally (M), Yaladi Bhojanagara District, Bengaluru-562124		(8) Name of Applicant: SRINIVAS SRINIVAS Address of Applicant: Associate Professor, Department of Electronics and Instrumentation Engineering, Vignana Institute of Technology and Science, Devalanki (V), Pothanahally (M), Yaladi Bhojanagara District, Bengaluru-562124	
(9) Name of Applicant: SRINIVAS SRINIVAS Address of Applicant: Associate Professor, Department of Electronics and Instrumentation Engineering, Vignana Institute of Technology and Science, Devalanki (V), Pothanahally (M), Yaladi Bhojanagara District, Bengaluru-562124		(10) Name of Applicant: SRINIVAS SRINIVAS Address of Applicant: Associate Professor, Department of Electronics and Instrumentation Engineering, Vignana Institute of Technology and Science, Devalanki (V), Pothanahally (M), Yaladi Bhojanagara District, Bengaluru-562124	
(11) Name of Applicant: SRINIVAS SRINIVAS Address of Applicant: Associate Professor, Department of Electronics and Instrumentation Engineering, Vignana Institute of Technology and Science, Devalanki (V), Pothanahally (M), Yaladi Bhojanagara District, Bengaluru-562124		(12) Name of Applicant: SRINIVAS SRINIVAS Address of Applicant: Associate Professor, Department of Electronics and Instrumentation Engineering, Vignana Institute of Technology and Science, Devalanki (V), Pothanahally (M), Yaladi Bhojanagara District, Bengaluru-562124	

(13) Abstract:
A wireless health monitoring system designed to measure dermal physiological indicators in real-time, including blood pressure, blood glucose levels, respiratory rate, skin conductance, and electrodermal activity (EDA). The system integrates a variety of sensors, powered by a battery and managed by a microcontroller, which are non-invasive, pain-free, and require minimal skin preparation. The data generated is processed and stored in a secure cloud-based platform for real-time monitoring and analysis. The system is portable, efficient, and requires no physical contact, making it suitable for both domestic use and clinical settings. The integration of wireless sensors into a cohesive system optimizes patient monitoring, facilitates preventive healthcare strategies, supports patient autonomy, and enables early identification of potential health risks.

No. of Pages: 17 No. of Claims: 1

The Patent Office Journal No. 49/2024 Dated 06/12/2024

115094

- Dr. Sivananda L Reddy, Associate Professor, Department of CSE has successfully attended the One-week Online Faculty Development Program on “Emerging Frontiers in AI: From Data Science to Generative AI and Its Applications” from 9th to 13th December 2024 organized by the Department of CSE, Andhra Loyola Institute of Engineering and Technology.



- Dr. Sivananda L Reddy, Associate Professor, Department of CSE has successfully presented the paper titles “Blockchain Anchored Federated Learning and Tokenized Traceability for Sustainable Food Supply Chains” and “Utilizing Machine Learning for the Identification of Chronic Heart Failure (CHF) from Heart Pulsations“ in the 4th IEEE International Conference on Ubiquitous Computing and Intelligent Information Systems (ICUIS-2024) organized by Shree Venkateshwara Hi-Tech Engineering College, Gobichettipalayam, Erode, Tamil Nadu, India during 12-13 December 2024.



CERTIFICATE OF PRESENTATION

This is to certify that

Dr. Sivananda Lahari Reddy

has successfully presented the paper entitled

Blockchain Anchored Federated Learning and Tokenized Traceability for Sustainable Food Supply Chains

in the

4th International Conference on Ubiquitous Computing and Intelligent Information Systems (ICUIS 2024) organised by Shree Venkateshwara Hi-Tech Engineering College, Gobichettipalayam, Erode, Tamil Nadu, India.
12-13, December 2024

Session Chair

Dr. P. Karuppusamy
Conference Chair

Dr. P. Thangavel
Patron



CERTIFICATE OF PRESENTATION

This is to certify that

Dr. Sivananda Lahari Reddy

has successfully presented the paper entitled

Utilizing Machine Learning for the Identification of Chronic Heart Failure (CHF) from Heart Pulsations

in the

4th International Conference on Ubiquitous Computing and Intelligent Information Systems (ICUIS 2024) organised by Shree Venkateshwara Hi-Tech Engineering College, Gobichettipalayam, Erode, Tamil Nadu, India.
12-13, December 2024

Session Chair

Dr. P. Karuppusamy
Conference Chair

Dr. P. Thangavel
Patron



Dr. Praveen Kulkarni
Associate Professor
Department of CSE

- Dr Praveen Kulkarni, Associate Professor, Department of CSE, Dayananda Sagar University has successfully participated and completed the AICTE Training and Learning (ATAL) Academy Faculty Development Program on “Quantum Machine Learning” at Christ Deemed to be University Kengeri Campus from 18/11/2024 to 23/11/2024.





Dr. George Fernandez I
Associate Professor
Department of CSE



Dr. Arunkumar Gopu
Associate Professor
Department of CSE

- Dr George Fernandez I and Dr. ArunKumar Gopu, Associate Professors, Department of CSE successfully served as Session Chair for the IEEE 4th International Conference on Innovative Computing, Intelligent Communication and Smart Electrical Systems (ICESES -2024) on 12th & 13th December 2024 at St. Joseph’s Institute of Technology, OMR, Chennai, India.





Prof. Sasikala N
Assistant Professor
Department of CSE

- Prof. Sasikala, Assistant Professor, Department of CSE has successfully Presented a paper titled, "Predictive Modelling for Engineering Student Performance Forecasting and Course Correction," at TALE 2024 - IEEE Education Society's International Conference on Teaching, Assessment, and Learning for Engineering during the 10th December 2024 and also attended the workshop titled "Design and Smartly Deploy Sustainability & Decarbonisation Features in Science, Engineering & Technology Education" in the conference on 12th December 2024 at Manipal Institute of Technology, Bengaluru.





Dr. Revathi V
Associate Professor
Department of CSE



Dr. T Gayathri
Assistant Professor
Department of CSE

- Dr. Revathi V, Associate Professor, and Dr. T Gayathri, Assistant Professor, Department of CSE successfully served as Session Chair for the IEEE 4th International Conference on Innovative Computing, Intelligent Communication and Smart Electrical Systems (ICSES -2024) on the 12th & 13th December 2024 at St. Joseph’s Institute of Technology, OMR, Chennai, India.





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



Prof. Kavyashree I Pattan
Assistant Professor
Department of CSE

- Dr. Renukadevi M.N. and Prof. Kavyashree I. Pattan Assistant Professor, Department of CSE, attended and presented a paper titled "Comparative Analysis of Machine Learning Algorithms for Water Region Classification in Flood-Affected Images" at the 6th International Conference on Machine Learning, Image Processing, Network Security and Data Science (MIND 2024) at NIT, GOA, on 21st December 2024.







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

- Dr. Renukadevi M.N, Assistant Professor, Department of CSE, has contributed as a session chair for Track 4 on the Network Security domain in the 6th International Conference on Machine Learning, Image Processing, Network Security and Data Science (MIND 2024) at NIT, GOA, on 21st December 2024.





Dr. Chetan V. S,
Assistant Professor
Department of CSE

- Dr. Chetan V. S, Assistant Professor, Dept. of CSE, served as a resource person for the Faculty Development Program (FDP) under the AICTE ATAL Scheme, "Integrative AI Technologies in Healthcare: Navigating the Future with Image Processing & Internet of Things", held on 16th to 21st December, 2024 at PESITM Shivamogga. He delivered the talk on "Implementing a CNN for disease detection in medical images."





Dr. Arunkumar Gopu
Associate Professor
Department of CSE

- Dr. Arunkumar Gopu, Associate Professor, Department of CSE attended the Conference on IT in Defence held on 16-17 December 2024, held at SR Valluri Auditorium, CSIR-NAL, Bengaluru Chapter in Association with CSIR-NAL, DRDO, Bengaluru.





Dr. Bipin Kumar Rai
Professor
Department of CSE

- Dr. Bipin Kumar Rai, Professor, Dept. of CSE has contributed as TPC member and reviewer in Sixth International Conference on Soft Computing and its Engineering Applications, December 10-12, 2024, Bangkok, Thailand





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

- Dr. M. Indushree has successfully completed 12-week online NPTEL certification and Faculty development program for the course titled “Cloud Computing” with Elite certification during July-October 2024.



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

This certificate is awarded to
INDUSHREE M
for successfully completing the course
Cloud Computing
with a consolidated score of **63 %**

Online Assignments	25/25	Proctored Exam	38.33/75
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Total number of candidates certified in this course: 30816

Jul-Oct 2024
(12 week course)

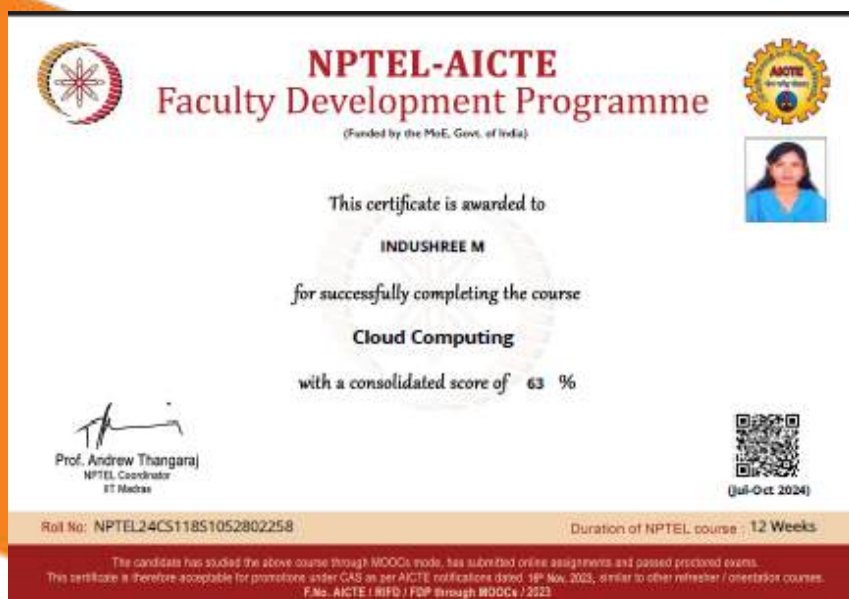
Indian Institute of Technology Kharagpur

Prof. Haimanti Banerji
Coordinator, NPTEL
IT Kharagpur

swayam

Roll No: NPTEL24CS118S1052802258 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
INDUSHREE M
for successfully completing the course
Cloud Computing
with a consolidated score of **63 %**

Prof. Andrew Thangaraj
NPTEL Coordinator
IT Madras

Duration of NPTEL course : 12 Weeks

Roll No: NPTEL24CS118S1052802258

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 31st Nov, 2023, similar to other refresher / orientation courses. F.No. AICTE / RFPD / FDP through MOOCs / 2023.

- Dr. Indushree M has successfully participated and completed AICTE Training and Learning (ATAL) Academy Faculty Development Program on “Quantum Computing and its Applications” at Global Academy of Technology from 09.12.2024 to 14.12.2024.





Dr. Mubeen Ahmed Khan
Assistant Professor
Department of CSE(CY)

- Dr. Mubeen Ahmed Khan has actively participated in the National Level Research Workshop (online) on "Strategies to publish research articles in reputed journals" on 04.12.2024 organized by PROGREZZ ACADEMY (Training and Research Institute), Tirupur, Tamil Nadu.



- Dr. Mubeen Ahmed Khan has completed the Module: Content Ownership from Researcher Academy on 19.12.2024.





Dr. Durbadal Chattaraj
Associate Professor & Chairperson
Department of CSE(CY)

- Dr. Durbadal Chattaraj has actively participated in the hybrid seminar on “Transaction-Level Verilog and its Ecosystem” by Steeve Hoover organized by IEEE-IISc VLSI Chapter on 03.12.2024.
- Dr. Durbadal Chattaraj has actively participated in the hybrid seminar on “Test Pattern Generation using SAT Attack” by Dr. Ujjwal Guin organized by IEEE-IISc VLSI Chapter on 28.11.2024.



- Dr. Durbadal Chattaraj along with students from the 5th semester and 7th semester of Cyber security attended the 31st IEEE International Conference on High-Performance Computing, Data and Analytics, four days conference held from 18.12.2024 to 21.12.2024 at the Radisson Blu, Marathahalli, Bengaluru. Continuing its legacy, HiPC 2024 brought together a global community of researchers, academicians, and industry experts to discuss advancements in high-performance computing (HPC), data science, and analytics. The conference featured workshops, keynote sessions, technical paper presentations, poster sessions, and networking opportunities.





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

- Dr. Dilipkumar Jang Bahadur Saini has published a paper titled” Innovative real Estate Management System: Artificial Intelligence-based Segregation” in the 5th International conference on Smart Electronics and communication (ICOSEC),2024. DOI: 10.1109/ICOSEC61587.2024.10722189

5th International Conference on Smart Electronics and Communication (ICOSEC 2024)
IEEE Xplore Part Number: CFP24V90-ART; ISBN: 979-8-3315-0440-3

Innovative Real Estate Management System: Artificial Intelligence-based Segregation

<p>1st Dr. Kapil Joshi Associate Professor Department of Computer Science & Engineering, Uttaranchal Institute of Technology (UIT), Dehradun, Uttarakhand, India kapiljoshi509@gmail.com https://orcid.org/0000-0003-1097-8347</p>	<p>2nd Dr. Kawerinder Singh Sidhu Assistant Professor Uttaranchal Institute of Management, Uttaranchal University, Dehradun, Uttarakhand, India kwsidhu0410@gmail.com</p>	<p>3rd Dr. Neeru Malik Associate Professor School of Engineering & Technology Pimpri Chinchwad University, Pune, Maharashtra, India, neerul508@gmail.com</p>
<p>4th Archana Jadhav Assistant Professor School of Engineering and Technology, Pimpri Chinchwad University, archana.raish700@gmail.com</p>	<p>5th Dr. Dilipkumar Jang Bahadur Saini Associate Professor, Department of Computer Science and Engineering, School of Engineering(SOE), Dayananda Sagar University, Bangalore 560 068, India dilipkumar@gmail.com 0000-0002-7608-8788</p>	<p>6th Dharendra Siddharth Computer Science and Engineering Geignozia University Greater Noida, India siddharth.dharendra@gmail.com</p>

Abstract — Information technology has grown very fast and has led to a lot of changes in the property industry, thus demanding businesses to enhance their operational standards. This research study analyzes how an advanced Real Estate Management System is designed and executed; this includes creating useful functions for working with data (CRUD operations), and better security measures among others like complex information visualization frameworks. The MERN stack is used here where innovative technologies are employed such as MongoDB as the database system; Express.js which is a web application framework running on Node.js; React that allows building user interfaces and finally Node.js itself being used for server-side scripting enabling asynchronous event-driven I/O. It offers a flexible and responsive structure that can handle huge sets of data common with real estate transactions during different stages. Apart from that, the system has a very broad user authentication method that adheres to the best practices used in the industry for ensuring data integrity and confidentiality. The system also comes with extensive data visualization capabilities by leveraging charting libraries like D3.js and Chart.js which allow quick viewing of property information, financials as well as market analysis by clients and administrators alike. In impact, the whole thing works as a planning tool, allowing professionals in the property sector to the productivity, safety, and definition of vision necessary to make accurate choices in a rapidly evolving digital context.

Keywords—Real Estate, React, Property management, Visual insights, Security, MERN Stack, MongoDB, Visualization tools, Authentication flow.

I. INTRODUCTION

The industry of real estate is distinguished by a continuous flow of data, that involves tenant details, properties, and finances. For people working in the property industry who want to remain competitive, analysing and utilizing this continuous flood of information is crucial. Recognizing the need for understanding, this article will present a comprehensive study on how to create and apply an up-to-date residential property management system. Such a system integrates modern features that improve upon traditional functions of basic property

management to make them more efficient in running the industry at large.

This system is meant to address problems caused by dealing with large and diverse datasets within the real estate industry. It doesn't just keep track of properties, clients, and financials; it also has additional tiers of user verification for added security. In this age of technology, having robust security measures is very important which this system provides. Furthermore, it has highly useful data presentation features that can help people make good judgements. With appropriate technology, individuals are able to comprehend the ever-changing property market and therefore make wiser decisions.

This document describes an innovative approach to the housing market that combines contemporary technological advancements with consumer protection and data-driven strategic recommendations. Its main objective is to streamline real estate transactions through current industry knowledge while beefing up security and underpinning sound judgments with credible figures.

II. LITERATURE REVIEW

Real estate management plays a crucial role in the fast-paced economic growth of today for several reasons. Here are detailed explanations of its significance:

A. Economic Contribution:

Real property, consisting of buildings for residential use, businesses, and industries, contributes to a large amount of a nation's assets. Successful administration makes sure that these valuable resources can be utilized to their extreme potential, leading to economic growth. Property transactions, such as buying, selling, and leasing, generate a significant amount of economic activity, as do real estate development, construction, and related services[1].

2024 5th International Conference on Smart Electronics and Communication (ICOSEC) | 979-8-3315-0440-3/24\$31.00 ©2024 IEEE
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Dr. Prajwalasimha S N
Assistant Professor
Department of CSE(CY)

- Dr. Prajwalasimha.S. N has completed the below modules of National Institute of Technical Teachers Training and Research (NITTTR) powered by All India Council for Technical Education (AICTE) during September 2024.
- Module 2: Professional Ethics and Sustainability
- Module 5: Technology Enabled Learning and Life-Long Self Learning
- Module 8: Institutional Management and Administrative Procedures



No: 12/2024/1/MB/107420



अखिल भारतीय तकनीकी शिक्षा परिषद्



प्रमाणित किया जाता है कि

प्रज्वालसिंह एन एन

एनआईटीटीटी पंजीयन क्रमांक : 20202111881

ने

राष्ट्रीय तकनीकी शिक्षक प्रशिक्षण पहल
के अंतर्गत

मॉड्यूल 8 : संस्थागत प्रबंधन और प्रशासनिक कार्यविधि
को सफलता पूर्वक पूर्ण किया।

All India Council for Technical Education (AICTE)



This is to certify that

PRAJWALASIMHA S N

NITTT Registration No: 20202111881

has successfully completed

**Module 8 : Institutional Management and Administrative Procedures
of**

National Initiative for Technical Teachers Training

Director
NITTT, Bhopal



Director
NITTT, Chandigarh



Member Secretary
AICTE



Director
NITTT, Chennai



Director
NITTT, Kolkata



SEPTEMBER 2024



Prof. Deepthika Karuppusamy
Assistant Professor
Department of CSE(CY)

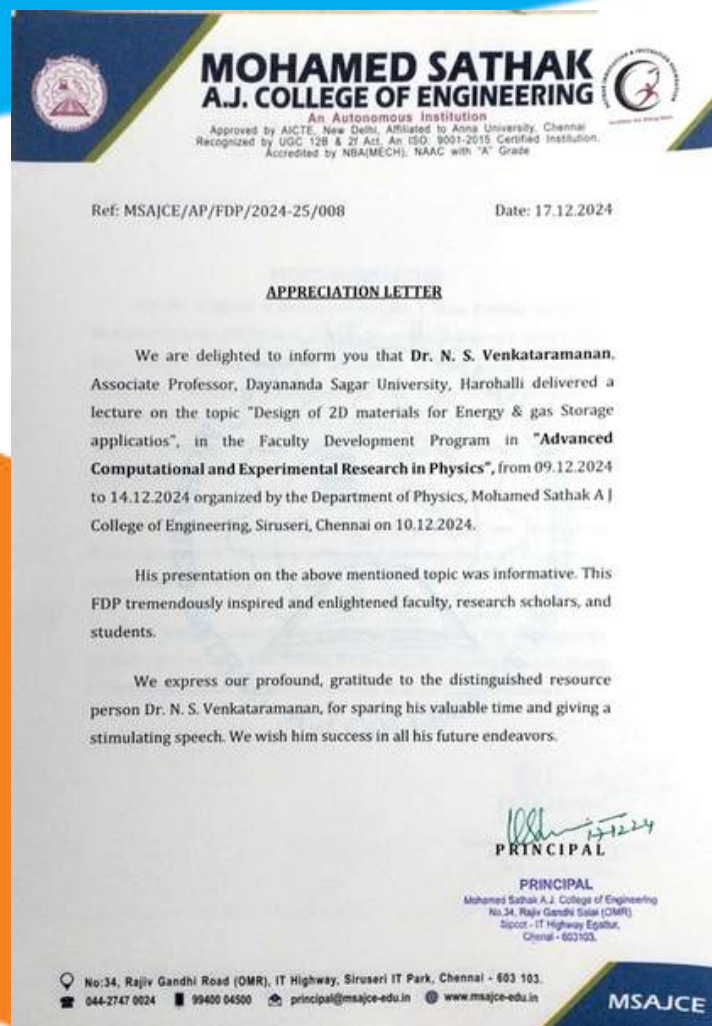
- Prof. K. Deepthika completed the below modules of the National Institute of Technical Teachers Training and Research (NITTTR) powered by the All India Council for Technical Education (AICTE) in September 2024.
- Module 5: Technology-Enabled Learning and Life-Long Self-Learning
- Module 8: Institutional Management and Administrative Procedures





Dr. Venkataramanan N S
Associate Professor
Department of Chemistry

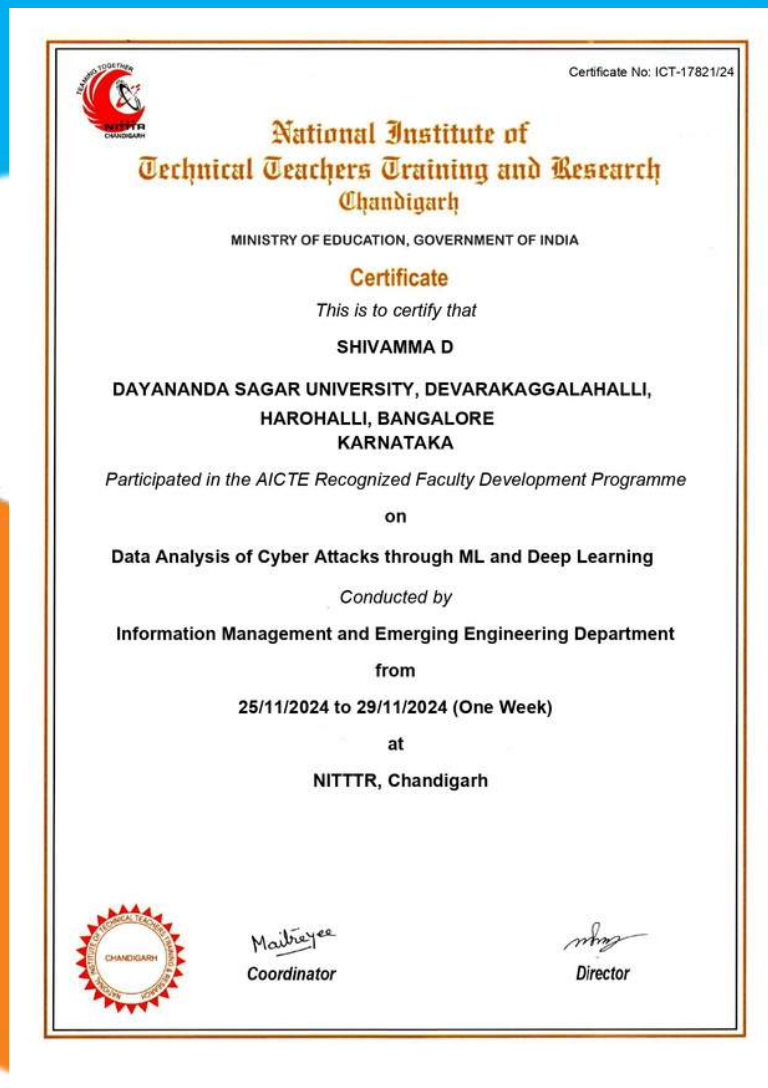
- Dr. VENKATARAMANAN N.S., Department of Chemistry, delivered a lecture on the topic “Design of 2D materials for energy & gas storage applications” in the Faculty Development Program in “Advanced Computational and Experimental Research in Physics” organized by the Department of Physics, Mohamed Sathak A J College of Engineering, Siruseri, Chennai on 10.12.2024.





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

- Prof. Shivamma D, Assistant Professor, participated in the AICTE Recognized Faculty Development Programme on Data Analysis of Cyber Attacks through ML and Deep Learning conducted by the Information Management and Emerging Engineering Department from 25/11/2024 to 29/11/2024 (One Week) at NITTTR, Chandigarh.





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

- Dr. U. Pavan Kumar has successfully presented the paper titled "Dynamic Mobility-Based Effective Load Balancing and QoS-Aware Network Selection in UAV Networks" 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.

The screenshot shows the IEEE Xplore digital library page for the paper. At the top, there is a banner for the 2024 Asian Conference on Communication and Networks (ASIANComNet) held in Bangkok, Thailand, from October 24-27, 2024. The paper title is "Dynamic Mobility based Effective Load Balancing and QoS-Aware Network Selection in UAV Networks". The author listed is Hussein Al-Aboudy from Mazaya University College. The abstract discusses the challenges of high-speed vehicles in VANETs and the development of a dynamic mobility-based network selection model (DELQNU) for UAVs. The keywords include Vehicular ad hoc networks (VANETs), Dynamic Mobility, Effective Load Balancing, QoS-Aware Network Selection, and Unmanned Aerial Vehicles (UAVs). The authors listed are Kurdi Waleed Hadi Madhloom, Hussein Al-Aboudy, U. Pavan Kumar, Zahraa Saad Abdulali, Mohammed Ihsan, and Fatima Alsalamy.

- Dr. U. Pavan Kumar, Assistant Professor participated in the conference for the research paper “LoRaWAN Security Issues and Proposed ML Based Mechanism to Mitigate DoS Attacks at the Gateway Level” in the 7th IEEE International Conference PUNECON 2024 held from 13th - 15th December 2024, jointly organized by the Defence Institute of Advanced Technology (DIAT) and IEEE Pune Section at DIAT Pune, Maharashtra, India.

IEEE PuneCon 2024

LoRaWAN Security Framework to Mitigate DoS Attacks at the Gateway Level using Machine Learning

¹J. Sebastian Nivas
Department of CSE, SoE,
Dayananda Sagar University,
Bangalore, India.
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²J. Jay A Celin
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Department of CSE [DS], SoE,
Dayananda Sagar University,
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⁶Dhru Kumar
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Dayananda Sagar University,
Bangalore, India.
kumar.dhru@gmail.com

Abstract: LoRaWAN, a popular protocol for low power wide area networks, is mainly used in Internet-of-Things oriented applications because of its ability to communicate over long distances and energy efficiency. Nonetheless, the security measures of the protocol have been discovered to be susceptible to different forms of attacks like eavesdropping, replay, flooding, jamming and Denial of Service (DoS) attacks. This study offers a thorough examination of security concerns and evaluates current remedies. In addition, we suggest a new method to reduce DoS attack by implementing machine learning approach to enhance the security of LoRaWAN networks.

Keywords: IoT, Security, Encryption, Key Management, LoRaWAN, Network Architecture.

protocol has 3 major layers namely: application layer, MAC layer and physical layer as shown in Figure 1.

Figure 1. Layers of LoRa-WAN.

- Dr. U. Pavan Kumar has successfully presented the paper titled “Detection and Identification of Vehicles SVM Method in Limited Surroundings” International Journal of Innovative Research in Science, Engineering and Technology (IJIRSET), Vol.13 Issue 11, November 2024.

International Journal of innovative Research of Science, Engineering and Technology (IJIRSET)

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Volume 13, Issue 11, November 2024

[DOI: 10.15680/IJIRSET.2024.1311109]

Detection and Identification of Vehicles SVM Method in Limited Surroundings

Surya P, Anjalai Vaspalle, Dr.U.Pavan Kumar, Ch.Arun Prakash

Assistant Professor, Department of ECE, RISE Krishna Sai Prakasham Group of Institutions, Andhra Pradesh, India
Associate Professor, Department of ECE, PBR Visvodaya Institute of Technology & Science, Andhra Pradesh, India
Associate Professor, Department of CSE - Data Science, Dayananda Sagar University, Bangalore, Karnataka, India
Assistant Professor, Department of ECE, RISE Krishna Sai Prakasham Group of Institutions, Andhra Pradesh, India

ABSTRACT: Identification and detection of vehicles in rush hour video surveillance recordings is essential to automate the system of surveillance and furthermore to manufacture a keen transportation system. In this paper a heavy strategy to detect and identification of vehicles is proposed which arrangements with issue like change in brightening. Background subtraction is done utilizing both Gaussian Mixture Model and Visual Background Extractor and supports dynamic changes in background. Vehicles are identified by finding shapes in the picture frame. Vehicles are followed by assigning out remarkable ID for every vehicle. Distance between the centroid of distinguished vehicle and existing vehicles is determined. On the off chance that the separation is more noteworthy than edge esteem then vehicle is viewed as arrived recently and a one of a kind ID is allotted for further following. Else, it is the vehicle will get a similar ID as in past frame. Detected-vehicle is ordered utilizing Support Vector Machine in each casing and ultimate conclusion is taken when the vehicle is going to exit from the scene.

KEYWORDS: Classification of vehicle, Supported Vector machine, Video surveillance, Vehicle identification.

- Dr. U. Pavan Kumar, Assistant Professor, attended the One Week Online Faculty Development program on Emerging Frontiers in AI: From Data Science to Generative AI and its Applications from 09.12.2024 to 13.12.2024 organized by the Department of Computer Science and Engineering, Andhra Loyola Institute of Engineering and Technology-Vijayawada.





Prof. Manjula M
Assistant Professor
Department of CSE(DS)

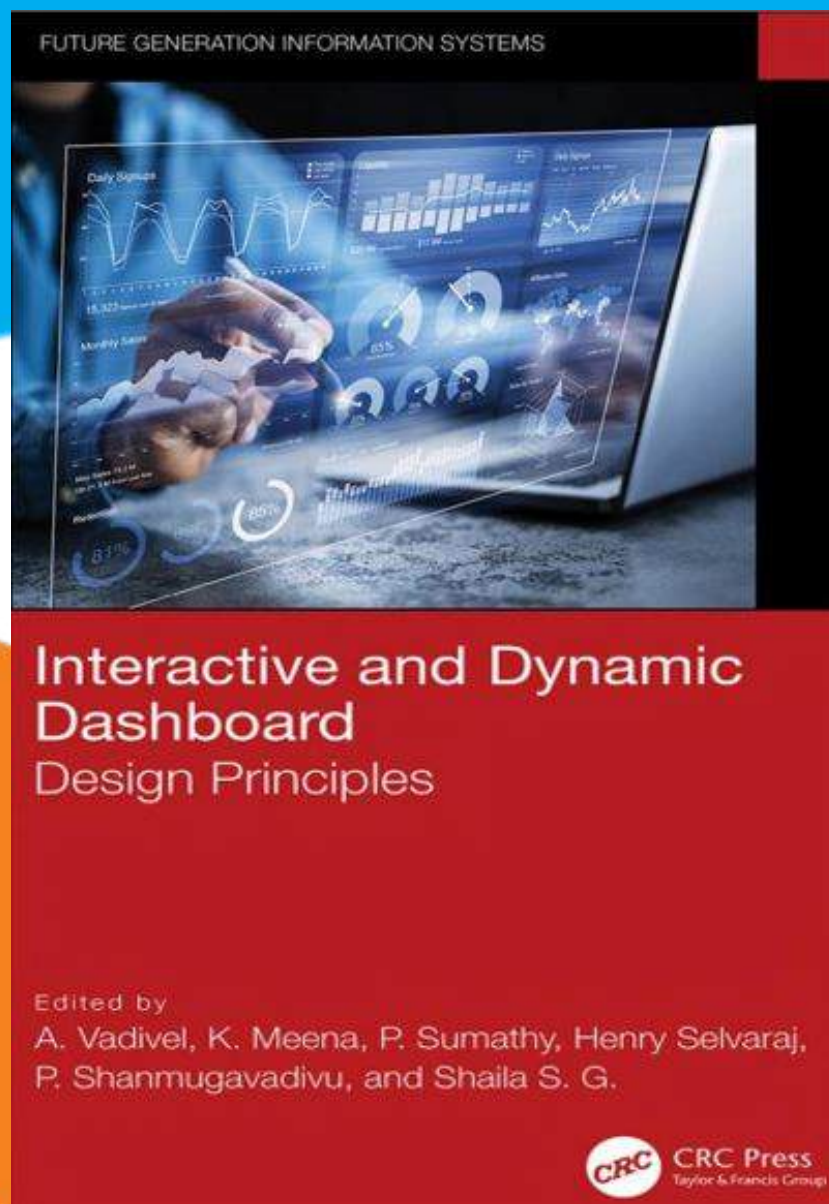
- Prof. Manjula M participated as a Mentor Grand Finale Smart India Hackathon 2024 at NIT Srinagar Jammu & Kashmir from 11-12th December 2024.





Dr. Shaila S. G
Professor and Chairperson
Department of CSE(DS)

- Dr. Shaila S G, Professor & Chairperson, Published a book Interactive and Dynamic Dashboard: Design Principles at CRC Press Taylor & Francis Group.



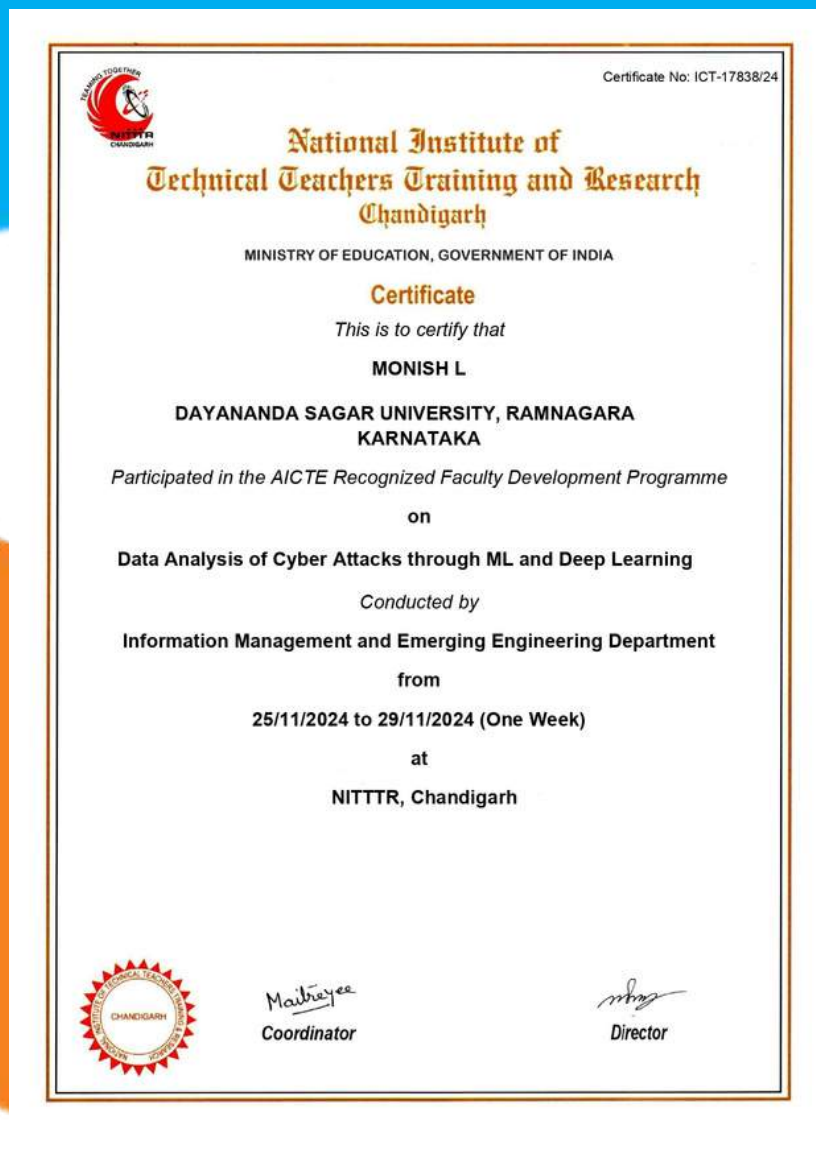
- Dr. Shaila S G, Professor & Chairperson, has successfully participated & completed the AICTE Training And Learning (ATAL) Academy Faculty Development Program on Artificial Intelligence in Data Science Applications at MUFFAKHAM JAH COLLEGE OF ENGINEERING AND TECHNOLOGY from 13/12/2024 to 19/12/2024





Prof. Monish L
Assistant Professor
Department of CSE(DS)

- Prof. Monish L, Assistant Professor, participated in the AICTE Recognized Faculty Development Programme on Data Analysis of Cyber Attacks through ML and Deep Learning conducted by the Information Management and Emerging Engineering Department from 25/11/2024 to 29/11/2024 (One Week) at NITTTR, Chandigarh.



- Prof. Monish L, Assistant Professor has successfully completed a free online course Python Project for Beginners provided by Great Learning Academy in December 2024.



- Prof. Monish L, Assistant Professor has successfully completed a free online course Prompt Engineering for ChatGPT provided by Great Learning Academy in December 2024.





Prof. Godhandaraman T
Assistant Professor
Department of CSE(DS)

- Prof. Godhandaraman T, Assistant Professor, attended the One Week Online Faculty Development program on Emerging Frontiers in AI: From Data Science to Generative AI and its Applications from 09.12.2024 to 13.12.2024 organized by the Department of Computer Science and Engineering, Andhra Loyola Institute of Engineering and Technology-Vijayawada.





Prof. Sindhu A
Assistant Professor
Department of CSE(DS)

- Prof. Sindhu A, Assistant Professor has successfully participated in & completed the AICTE Training And Learning (ATAL) Academy Faculty Development Program on Artificial Intelligence in Data Science Applications at MUFFAKHAM JAH COLLEGE OF ENGINEERING AND TECHNOLOGY from 13/12/2024 to 19/12/2024.





Dr. Santhosh Kumar G
Associate Professor
Department of CSE(DS)

- Dr. Santhosh Kumar G, Associate Professor, attended the One Week Online Faculty Development program on Emerging Frontiers in AI: From Data Science to Generative AI and its Applications from 09.12.2024 to 13.12.2024 organized by the Department of Computer Science and Engineering, Andhra Loyola Institute of Engineering and Technology-Vijayawada.





Dr. Suresh Arumugam
Associate Professor
Department of CSE(DS)

- Dr. Suresh A, Associate Professor, has successfully participated & completed the AICTE Training and Learning (ATAL) Academy Faculty Development Program on Artificial Intelligence in Data Science Applications at MUFFAKHAM JAH COLLEGE OF ENGINEERING AND TECHNOLOGY from 13/12/2024 to 19/12/2024.





Dr. P M G B Asdaque
Assistant Professor
Department of ME



Dr. Viswanathan R
Associate Professor
Department of ME

- Dr. P M G Bashir Asdaque and Dr. Viswanathan R visited Flora Educational Society, Pune to participate in FDP supported by Dassault Systems and organized by Dr. Mohan Godse.





Prof. M Lorate Shiny
Assistant Professor
Department of ECE

- Prof. M Lorate Shiny successfully presented their paper, “Design and Development of Pulse Rate Monitoring System Powered by STM32 Microcontroller,” at the 5th International Conference on IoT-Based Control Networks and Intelligent Systems (ICICNIS 2024).





Prof. Nadeem Pasha
Assistant Professor
Department of ECE

- Prof. Nadeem Pasha, Assistant Professor, Department of Electronics and Communication Engineering at Dayananda Sagar University, has successfully completed the AICTE ATAL Faculty Development Program on Crystal Growth, Semiconductor Processing, and Manufacturing Technologies held at the prestigious Indian Institute of Technology (Indian School of Mines), Dhanbad from 16th to 21st December 2024.
- Prof. Nadeem Pasha, Assistant Professor, has successfully completed the AICTE Training and Learning (ATAL) Academy Faculty Development Program. The program, titled “Recent Trends in VLSI Design Using Nanotechnology”, was held at the Meerut Institute of Engineering and Technology from November 25 to November 30, 2024.





Dr. Arun Balodi
Chairman & Professor
Department of ECE

- Dr. Arun Balodi, Chairperson and Professor, Department of Electronics and Communication Engineering at Dayananda Sagar University, Bangalore, successfully participated in the AICTE Training and Learning (ATAL) Academy Faculty Development Program titled “Pioneering the Future of Healthcare: Robotics, Deep Learning, and Emerging Technologies.” The program was held at the Academy of Technology from December 2 to December 7, 2024.





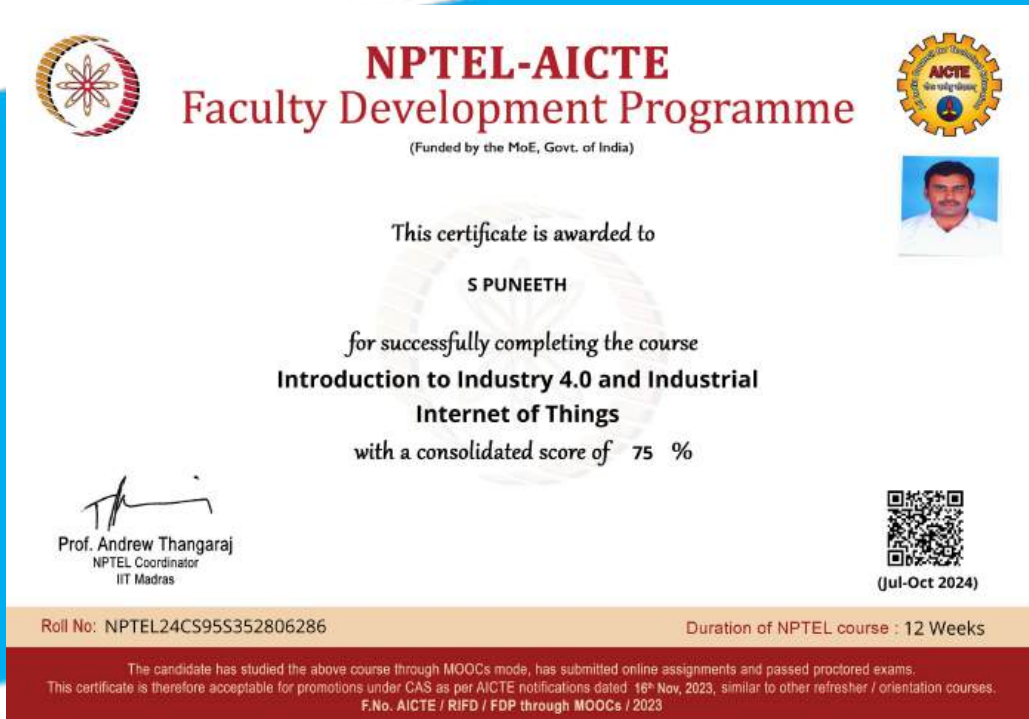
Prof. Puneeth S
Assistant Professor
Department of ECE

- Prof. Puneeth S, Assistant Professor at Dayananda Sagar University, has successfully completed the AICTE Training and Learning (ATAL) Academy Faculty Development Program on Artificial Intelligence & IoT-Driven Data Analytics in Industry 5.0. The program was held at the School of Engineering & Technology, D Y Patil University, Ambi, Pune, from December 9 to December 14, 2024.



- Mr. S. Puneeth has successfully completed the prestigious NPTEL course on "Introduction to Industry 4.0 and Industrial Internet of Things" with a consolidated score of 75%.

- Mr. S. Puneeth has successfully completed the prestigious NPTEL course on "Introduction to Industry 4.0 and Industrial Internet of Things" with a consolidated score of 75%.



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

This certificate is awarded to
S PUNEETH
for successfully completing the course
Introduction to Industry 4.0 and Industrial Internet of Things
with a consolidated score of **75 %**

Prof. Andrew Thangaraj
NPTEL Coordinator
IIT Madras

Roll No: NPTEL24CS95S352806286 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 16th Nov, 2023, similar to other refresher / orientation courses. F.No. AICTE / RIFD / FDP through MOOCs / 2023



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

This certificate is awarded to
S PUNEETH
for successfully completing the course
Introduction to Industry 4.0 and Industrial Internet of Things
with a consolidated score of **75 %**

Online Assignments	24.16/25	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
Coordinator, NPTEL
IIT Kharagpur

Indian Institute of Technology Kharagpur

Roll No: NPTEL24CS95S352806286 To verify the certificate No. of credits recommended: 3 or 4



Dr. Mukti Chaturvedi
Assistant Professor
Department of ECE

- Dr. Mukti Chaturvedi, Assistant Professor has successfully completed the AICTE Training and Learning (ATAL) Academy Faculty Development Program on Digital Manufacturing of Personalized Implants in Welding-Based Additive Manufacturing and Automated Post Machining. This program was conducted by the Coimbatore Institute of Engineering and Technology from December 9 to December 14, 2024.





Prof. Abhinav Karan
Assistant Professor
Department of ECE

- Prof. Abhinav Karan, Assistant Professor has successfully completed the AICTE Training and Learning (ATAL) Academy Faculty Development Program on AI and Quantum Computing: The Future of Intelligent Systems. This advanced program was held at the Bharat Institute of Engineering and Technology from December 9 to December 14, 2024.





Dr. Pushpa Mala
Associate Professor
Department of ECE

- Dr. Pushpa Mala S, Chair of IEEE TEMS, Bangalore Chapter, participated as a Guest of Honor in the National Level Inter-Collegiate 24-Hour Hackathon AVINYA-2024, organized by the SJC Institute of Technology, Chikkaballapur.

[[Jai Sri Gurudev]]
Sri Adichunchanagiri Shikshana Trust (R.)

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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING
In Association with

Organizes

National Level Inter Collegiate 24 Hrs Hackathon

AVINYA-2024
29th & 30th November 2024

INVITATION

Divine Blessings

His Holiness the Divine Soul Paramapoojya Jagadguru Padmabhushana
Sri Sri Sri Dr. Balagandharanatha Mahaswamiji
His Holiness Paramapoojya Jagadguru
Sri Sri Sri Dr. Nirmalanandanatha Mahaswamiji

Blessings

Poojya Sri Sri Mangalanatha Swamiji

INAUGURATION

CHIEF GUEST	Dr. Chengappa M.R	Dr. Usha Rani K R	Dr. Pushpa Mala S
<small>Chair, IEEE Egg. in Medicine & Biology, Bangalore Chapter Director, Medical R&D, Samsung Research, Bangalore</small>	<small>Chair, IEEE SIGHT, IEEE Bangalore Section Senior Technologist Hewlett Packard Enterprise, Bangalore</small>	<small>Treasurer, IEEE SIGHT Bangalore Section Professor, Department of ECE RV College of Engineering, Bangalore</small>	<small>Chair, IEEE TEMS, Bangalore Chapter Associate Professor, Department of ECE DSU, Bangalore</small>
Venue: ECE Seminar Hall		Date & Time: 9:30 AM, 29th November	

VALEDICTORY

CHIEF GUESTS	Dhairya Man Singh	Dr. Bhagya R	Pulkit Goel
<small>Senior Deputy General Manager I&T Precision Engineering Systems, Bangalore IEEE WIE Bangalore Execom member</small>	<small>Sales Director Digital Technologies Bangalore</small>	<small>Academic Lesson Chair & Member of IEEE CTSoc Associate Professor, Department of ECE RV College of Engineering, Bangalore</small>	<small>Application Engineer Digital Technologies Bangalore</small>
Venue: BGS Conference Hall, Aeronautical Block		Date & Time: 12:00 PM, 30th November	

CONVENER	FINANCE CHAIR	ORGANISING CHAIR	PROGRAM CHAIR
Dr. C.Rangaswamy Branch Counsellor, SB IEEE, SJCIT Professor & HOD Dept.of ECE, SJCIT	Mr. Suresha J Registrar SJCIT, Chikkaballapur	Dr. Manjunath Kumar B H Advisor-Computer Society, SB IEEE, SJCIT Dean Academics SJCIT, Chikkaballapur	Dr. G T Raju Senior IEEE Member Principal SJCIT, Chikkaballapur



Dr. Vinu R
Associate Professor
Department of ECE

- Dr. Vinu R, Associate Professor in the Department of Electronics and Communication Engineering has successfully completed the NPTEL Online Certification course on Microwave Engineering with an Elite Certification.

The certificate is titled "Elite NPTEL ONLINE CERTIFICATION" and is awarded to DR VINU R for successfully completing the course "Microwave Engineering" with a consolidated score of 64%. The certificate includes a table of scores for Online Assignments (21.75/25) and Proctored Exam (42/75). It is signed by Prof. T. V. Bharat, Head, Centre for Educational Technology, NPTEL Coordinator, IIT Guwahati, dated Jul-Oct 2024 (12 week course). The certificate is issued by Indian Institute of Technology Guwahati and is part of the Swayam program. The roll number is NPTEL24EE115S652805687 and the recommended credits are 3 or 4.

Online Assignments	21.75/25	Proctored Exam	42/75
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- Dr. Vinu R has recently published a significant research paper titled: "Optimized neural network for vulnerable plaque detection in OCT images with noise tolerance and adaptive coefficient zeroing"



Optimized neural network for vulnerable plaque detection in OCT images with noise tolerance and adaptive coefficient zeroing

S. Perumal Sankar ¹, S. Vinu ², S. Sreelekshmi ¹, N. Viswanath ²

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<https://doi.org/10.1016/j.bspc.2024.107946>

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Highlights

- CVP-OCT-NTACZNN-PCBESA detects cardiovascular plaques using OCT imaging.
- Integrates Data-adaptive Gaussian Average Filtering for improved image quality.
- Employs NTACZNN neural network for precise plaque classification.
- Outperforms existing methods by up to 38.27% in accuracy.
- Promises earlier detection and improved treatment outcomes in cardiology.

Abstract

Background

Optical Coherence Tomography (OCT) was a non-invasive imaging method that provides higher-resolution images of biological tissues. OCT is used in cardiovascular medicine to identify Atherosclerosis plaques, which are a kind of plaque in blood arteries that represent a significant chance of rupture along with subsequent cardiovascular problems. By analyzing OCT images, healthcare professionals can identify specific features of atherosclerosis plaques, including thin fibrous caps, fatty cores, and micro-calcifications. This allows early identification of life-threatening risks and targeted treatments. Still, the analysis method is subject to miscalculations and high workload.

- Dr. Vinu R. Associate Professor, along with co-author Prof. Jisy N.K., Assistant Professor, presented a research paper titled “Artificial Intelligence-based Fast Billing System” at the 5th IEEE-sponsored International Conference on IoT Based Control Networks and Intelligent Systems (ICICNIS 2024). The conference was organized by the T. John Institute of Technology, Bengaluru, and held on December 17-18, 2024.





Prof. V Sudharsan
Assistant Professor
Department of ECE

- Prof. V Sudharsan, Assistant Professor, has successfully completed the NPTEL Online Certification Course on Digital Circuits with an Elite Certification.

Elite

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

This certificate is awarded to
V SUDHARSAN
for successfully completing the course

Digital Circuits

with a consolidated score of **66** %

Online Assignments	23.97/25	Proctored Exam	42/75
--------------------	----------	----------------	-------

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

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BETTER KNOWLEDGE, BETTER FUTURE

Roll No: NPTEL24EE147S952801787 To verify the certificate No. of credits recommended: 3 or 4



Dr. Owais Ahmad Shah
Assistant Professor
Department of ECE

- Dr. Owais Ahmad Shah, Assistant Professor, presented a research paper titled “Predictive Modeling of Compressive Strength in Coconut Shell-Embedded Concrete Using Ensemble Regression Models” at the 2nd IEEE International Conference on Integrated Intelligence and Communication Systems (ICIICS-2024).





Dr. B. M. Ashwin Desai
Associate Professor
Department of ECE

- Dr. B. M. Ashwin Desai (Associate Professor), Rakshith Prajwal R. S. (ENG21EC0093), and Sameer A. Nadaf (ENG21EC0102) attended the IEEE 18th International Conference on Industrial and Information Systems (ICIIS 2024) held at IIT Madras from December 21st to 23rd, 2024.





Dr. Divyashree H B
Assistant Professor
Department of ECE

- Dr. Divyashree H B presented her paper, “Improving the Efficiency of EMG-Based Prosthetic Arm Using EEG,” at the MP-TEAS 2024 International Conference, held at IES University, Bhopal, from 22nd to 24th November 2024.





Dr. Sneha Sharma
Assistant Professor
Department of ECE

- Dr. Sneha Sharma achieved a consolidated score of 86% in the FDP course conducted by IIT Madras, supported by the Ministry of Education, Government of India.
- Dr. Sneha Sharma also earned the Elite Certification in the same domain through the NPTEL Online Certification program conducted by IIT Guwahati.

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

This certificate is awarded to
SNEHA SHARMA
for successfully completing the course
System Design Through Verilog
with a consolidated score of **86 %**

Prof. Andrew Thangaraj
NPTEL Coordinator
IIT Madras

QR Code
(Jul-Sep 2024)

Roll No: NPTEL24EE94S332005595 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 18th Nov. 2023, similar to other refresher / orientation courses. F.No. AICTE / RFD / FDP through MOOCs / 2023

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

This certificate is awarded to
SNEHA SHARMA
for successfully completing the course
System Design Through Verilog
with a consolidated score of **86 %**

Online Assignments	24.5/25	Proctored Exam	61.5/75
--------------------	---------	----------------	---------

Total number of candidates certified in this course: **2329**

Jul-Sep 2024
(8 week course)

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

Indian Institute of Technology Guwahati

swayam

Roll No: NPTEL24EE94S332005595 To verify the certificate QR Code No. of credits recommended: 2 or 3



Dr.Sudha D
Associate Professor
Department of CST

- Dr. Sudha reviewed the papers in the International Conference on Communication, Computing, and Industry 6.0 -2024 (C2I6-2024) in association with IEEE section Bangalore, organized by CMR Institute of Technology, Bengaluru on 6th and 7th December 2024.



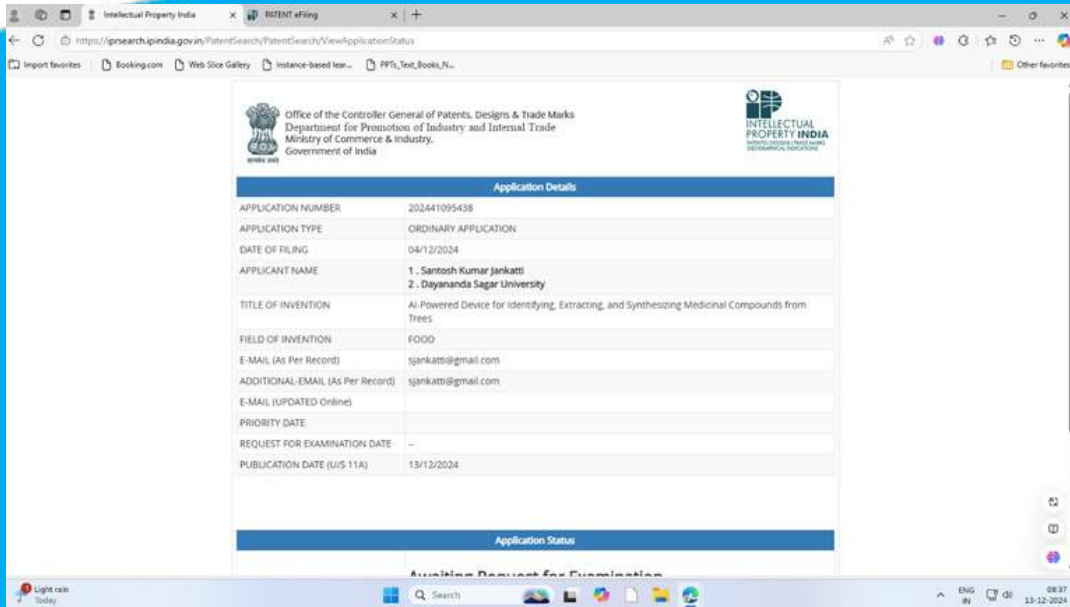


Dr. Santhosh Kumar J
Associate Professor
Department of CST

- Dr. Santosh Kumar J participated 5-day webinar titled "Beginner Workshop on KNIME" conducted by Webinar Park on December 2-6, 2024.



- Dr. Santosh Kumar J published a patent on "AI-Powered Device for Identifying, Extracting and Synthesizing Medicinal Compounds from Trees" (Application Number: 202441095438).





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

- Dr. Lakshmanan, Assistant Professor, Dept. of CSE (AI&ML) has been awarded the certificate for successfully presenting the paper entitled “Leveraging Blockchain for Secure and Efficient Crowdfunding: An Optimized Particle Swarm Approach” at the 9th International Conference on Communication and Electronics Systems (ICCES 2024) organized by PPG Institute of Technology, Coimbatore, India on 16-18, December 2024.



Certificate of Presentation

This is to certify that

Lakshmanan M

has successfully presented the paper entitled

Leveraging Blockchain for Secure and Efficient Crowdfunding: An
Optimized Particle Swarm Approach

at

9th International Conference on
Communication and Electronics Systems (ICCES 2024)
organised by PPG Institute of Technology,
Coimbatore, India on 16-18, December 2024.

Session Chair

Dr. V. Bindhu
Organizing Chair

Dr. Nandhakumar S
Principal

- Dr. LAKSHMANAN M, Assistant Professor, Dept. of CSE (AI&ML) has successfully participated in & completed the AICTE Training and Learning (ATAL) Academy Faculty Development Program on Exploring Emerging Technologies in Next-Gen Communication Networks at R.L. JALAPPA INSTITUTE OF TECHNOLOGY from 25/11/2024 to 30/11/2024.



Dr. Shreyas Rajendra Hole
Assistant Professor
Department of CSE(AI&ML)

- Dr. Shreyas Rajendra Hole, Assistant Professor, Dept. of CSE (AI&ML) has awarded the certificate for the presentation of a paper titled “TRANSFORMATIVE EFFECTS OF ARTIFICIAL INTELLIGENCE ON WORKFORCE DYNAMICS IN INDUSTRY 4.0” at IEEE International Conference on Augmented Reality, Intelligent Systems, and Industrial Automation (ARIIA-2024) 20-21, December 2024 Manipal Institute of Technology, Manipal Academy of Higher Education, Manipal, India.



- Dr. Shreyas Rajendra Hole, Assistant Professor, Dept. of CSE (AI&ML) has awarded the certificate for the presentation of a paper titled “IMPACT OF ARTIFICIAL INTELLIGENCE ON THE DEVELOPMENT OF EMPLOYMENT AND THE LABOR MARKET” at IEEE International Conference on Augmented Reality, Intelligent Systems, and Industrial Automation (ARIIA-2024) 20-21, December 2024 Manipal Institute of Technology, Manipal Academy of Higher Education, Manipal, India.



- Dr. Shreyas Rajendra Hole, Assistant Professor, Dept. of CSE (AI&ML) has awarded the certificate in recognition of distinguished support and expertise as a Reviewer in ensuring the success of The International Conference on Advancements in Artificial Intelligence and Machine Learning for Security (ICAAIMLS-2024), organized by the Center for Artificial Intelligence and Machine Learning, Institute for Technical Education and Research, Siksha 'O' Anusandhan (Deemed to be) University, Bhubaneswar, during 20 - 21 December 2024.



- Dr. Shreyas Rajendra Hole, Assistant Professor, Dept. of CSE (AI&ML) has awarded the certificate in recognition of distinguished support and expertise as a Session Chair in ensuring the success of The International Conference on Advancements in Artificial Intelligence and Machine Learning for Security (ICAAIMLS-2024), organized by the Center for Artificial Intelligence and Machine Learning, Institute for Technical Education and Research, Siksha 'O' Anusandhan (Deemed to be) University, Bhubaneswar, during 20 - 21 December 2024.



Dr. Vinutha N
Associate Professor
Department of CSE(AIML)

- Dr. Vinutha N, Associate Professor, Dept. of CSE (AI&ML), the paper titled "Attention-Enhanced Transfer Learning for Emphysema Classification Using CBAM-Augmented ResNet-50" has been accepted for presentation at the 6th International Conference on Recent Advances in Information Technology (RAIT) 2025, scheduled to be held on March 6-8, 2025 at Department of Computer Science and Engineering IIT ISM Dhanbad.



Dr. Vinutha N
Associate Professor
Department of CSE(AIML)



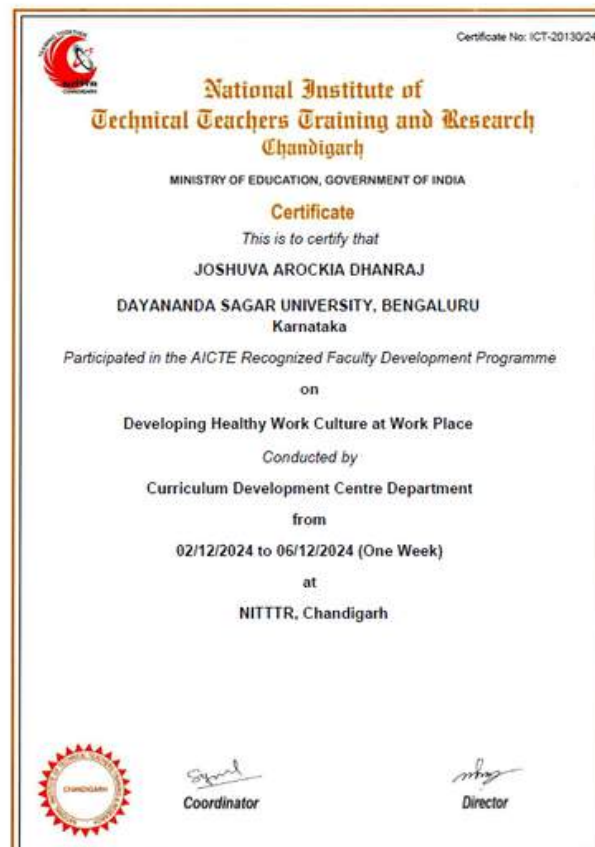
Prof. Pradeep Kumar K
Assistant Professor
Department of CSE(AIML)

- Dr. Vinutha N (Associate Professor), Pradeep Kumar K (Assistant Professor) Dept. of CSE (AI&ML), the paper titled "Augmenting Medical Diagnostics with AI: A Dual Approach Using RAG-Based Chatbots and Nano GPT Models" has been accepted for presentation at the 6th International Conference on Recent Advances in Information Technology.



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

- Dr. Joshuva Arockia Dhanraj, Associate Professor, Dept. of CSE (AI&ML) has published a paper in Sensor Review journal (Q3) paper entitled “Cameraless sensor fusion: developing a cost-effective driver assistance system using radar and ultrasonic sensor”.
- Dr. Joshuva Arockia Dhanraj, Associate Professor, Dept. of CSE (AI&ML) has participated in the AICTE Recognized Faculty Development Programme on “Developing Healthy Work Culture at Work Place” Conducted by the Curriculum Development Centre Department from 02/12/2024 to 06/12/2024 (One Week) at NITTTR, Chandigarh.





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

- Dr. Mude Nagarjuna Naik, Assistant Professor, Dept. of CSE (AI&ML) has awarded the certificate for the presentation of a paper titled “IMPACT OF ARTIFICIAL INTELLIGENCE ON THE DEVELOPMENT OF EMPLOYMENT AND THE LABOR MARKET” at IEEE International Conference on Augmented Reality, Intelligent Systems, and Industrial Automation (ARIIA-2024) 20-21, December 2024 Manipal Institute of Technology, Manipal Academy of Higher Education, Manipal, India.





SCHOOL OF ENGINEERING



STUDENT ACHIEVEMENTS

“Triumphant Win at Smart India Hackathon 2024”

- The students of team “Shamsheer” from Dayananda Sagar University have brought immense pride by emerging as winners of the prestigious Smart India Hackathon (SIH) 2024 Grand Finale at Sri Krishna College of Engineering and Technology (SKCET), Coimbatore, this 36-hour non-stop hackathon tested the creativity, technical expertise, and perseverance of participants from across the country. Competing with some of the nation’s best talent, the team delivered an innovative and impactful solution for problem statement SIH1626, aimed at transforming healthcare data management and information management operations.

Team Shamsheer consisted of Mr. Rohan Jaiswal (Team Lead) (ENG22CS0578), Mr. Utkarsh Priya (ENG22CS0602), Mr. Ritwik Vasundh (ENG22AM0125), Ms. Rashi Baidya (ENG22CS0406), Ms. Chinmayi Palled (ENG22CS0280), and Ms. Jiya Patel (ENG22CS0387), 5th Semester CSE Students as team Shamsheer mentored by Dr. Bipin Kumar Rai, professor, department of CSE and Mr. Tarun Agarwal, Sde 2 / tech lead.

This victory is a testament to the innovative spirit, adaptability, and resilience. The college proudly congratulates the team members and their mentors for this outstanding achievement. Their success highlights the strength of our academic ecosystem and inspires the next generation of innovators to aim high and achieve excellence.





- The final-year students from the Aerospace Engineering Department, Mr. Maruthi Reedy (ENG21AS0023) and Mr. Amshu Arun (ENG21AS0008), actively participated in a webinar titled eVTOL Mobility & The Digital Era: Are You Ready for Liftoff? organized by Dassault Systems 3D Excite on 4th December 2024.



- The final-year students from the Department of Aerospace Engineering, Mr. K. Raghav (ENG21AS0016) and Mr. Yashas V. (ENG21AS0051) of Dayananda Sagar University, participated in and presented conference papers titled “Air Quality Testing and Validation Using Drone Technology” and “Design, Integration, and Simulation of a Model Rocket System for CanSat Deployment” at the International Conference on Advances in Aerospace Technologies held at SRM Institute of Science and Technology on 4th and 5th December 2024, under the guidance of Prof. Sripad Kulkarni S..





- The III-year students Ms. Pragathi (ENG23AS0031), Ms. Prananya (ENG23AS0011), and Ms. Ridima Jain (ENG21AS0014) from the Department of Aerospace Engineering at Dayananda Sagar University actively participated in the TIE Global Summit held in Bangalore from 9th to 11th December 2024, where they presented their innovative ideas.



- On 14th December 2024, Mr. Panani Purushottam Pandey (ENG21AS0030), a final-year student from the Department of Aerospace Engineering at Dayananda Sagar University, presented a paper titled An Improved Nonlinear Damping Model for Supersonic Air-Intake Buzz and Control Using Surrogate-Model Concept at the 10th Symposium on Applied Aerodynamics & Design of Aerospace Vehicles (SAROD 24). The presentation was made under the guidance of Dr. Suryanarayana G.K., Professor in the Department of Aerospace Engineering, DSU.



- Mr. Ronada Sakalesha (ENG23CS0165), a 3rd-semester CSE Student, successfully participated in the BuildIt Workshop and the 6-Hour Hackathon BuildIt organized by the Department of CSE, Dayananda Sagar University, on 25 November 2024.



- Mr. Sameer S Katte (ENG22CS0148), Mr. Saikumar V Jadhav (ENG22CS0145), Mr. Sriram Ravindra (ENG22CS0185), Ms. Samrdhe (ENG22CY0022) and Mr. Sai Shravan V (ENG22CS0144), 5th Semester CSE Students as team Participated and received runner ups by winning cash prize of 20K in the National Level HackElite '24 event conducted by JSS, Mysore during 14th December 2024.



- Mr. Prajwal B R (ENG22CS0121), Mr. Navtej S (ENG22CS0109), Mr. Nithin P Hegde (ENG22CS0113), Mr. Pavankumar P S (ENG22CS0117) and Mr. Pratham U K (ENG22CS0123), 5th semester CSE Students, under the guidance of Prof. Mala B A, Assistant Professor presented a paper titled “Smart Cradle: A Secured Assistance and Monitoring system for baby using IoT” in the IEEE 5th International Conference on IoT Based Control Networks and Intelligent Systems (ICICNIS-2024) organized by T. John Institute of Technology, Bengaluru, Karnataka on 17th December 2024.





- Mr. Jayesh Ranjan (ENG23CS0326), 3rd semester CSE Student and Student President, E-CELL, won A Notable Innovation Award of ₹40,000 cash prize at INNOTECH IDEATHON 2024, held by DERBI Foundation & SINE IIT Bombay on Dec 20-21, 2024.



- Mr. Kishan. G. A (ENG23CY0020) has successfully completed Cyber Security Assessment: CompTIA Security+ & CYSA+ an online non-credit course authorized by IBM and offered through Coursera.



- Mr. Bansidharee Maji (ENG22CY0006) and Mr. Srihari K B (ENG21CY0043) accompanied by Dr. Durbadal Chattaraj attended the 31st IEEE International Conference on High-Performance Computing, Data, and Analytics, four days conference held from 18.12.2024 to 21.12.2024 at the Radisson Blu, Marathahalli, Bengaluru. Continuing its legacy, HiPC 2024 brought together a global community of researchers, academicians, and industry experts to discuss advancements in high-performance computing (HPC), data science, and analytics. The conference featured workshops, keynote sessions, technical paper presentations, poster sessions, and networking opportunities.



- Mr. Nikhil Kumar (ENG22EC0100), Mr. Krishna Idnani (ENG22CS0083), Ms. Jyoti Shree (ENG22CT0008), Mr. Janardhan K S (ENG22DS0004), Mr. Sujeeth Kumar (ENG22DS0019), and Mr. Om Singh (ENG23DS1013) along with Mentor Prof. Manjula participated in SIH 2024.





- Ms. S Nandini (ENG21DS0034), got admission into the Master of Science (Data and Computational Science) at University College Dublin, Ireland.
- Mr. Pranjal Mewara (ENG21DS0026) - got an offer from Amazon as a Business Intel Eng-Intern with a stipend of 70,000 Rs per month.
- Mr. Nitin Prajwal R (ENG22DS0039) has been officially selected as the STUDENT LEAD of GOOGLE Developer Groups.

- Mr. Thejas Gowda T S for successfully completing the course Math & Optimizations: Introducing Sets & Set Operations on December 13, 2024, at Infosys Springboard.



- Ms. Niharika R (ENG21CT0028) of 7th semester CST got selected in ZScalar Campus Placement Drive organized by Department of Training and Placement on 03rd December 2024



- Mr. Ahmed Isa (ENG22CT0039), Ms. Nancy (ENG22CT0043), and Mr. Satyam (ENG23CT1002) participated in the TGS Profile.in TIE Summit 2024 and secured the 4th runner-up position.



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