DAYANANDA SAGAR UNIVERSITY

ACCREDITED WITH GRADE A+ NAAC

SCHOOL OF ENGINEERING

SOE - "The Weekly Buzz"

The Official Weekly 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

- Design and deliver contemporary engineering curricula to address regional and global needs while emphasizing ethics, values, integrity and regional relevance.

- Carryout 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.

- Develop regional and national leaders to advance the society and economy.

Faculty Contributions

Department Of Computer Science & Engineering

- Dr. Kousalya Govardhanan, Professor, Department of CSE & Dean R&D, has published a paper in IEEE Internet of Things Journal with the title “VPSI 2.0: IoT-Based Hybrid Protocol with Simultaneous Equations for Real-Time Seizure Classification and False-Negative Mitigation” during 28th October 2024 with DOI:10.1109/JIOT.2024.3486991. https://ieeexplore.ieee.org/document/10736557.


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

Page(s): 1 - 1 DOI: 10.1109/JIOT.2024.3486991

Date of Publication: 28 October 2024 Publisher: IEEE

ISSN Information:

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


Certificate of Presentation

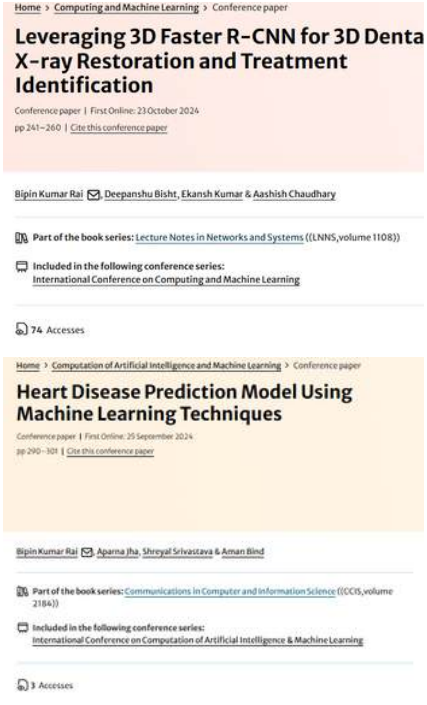
This is to certify that

has presented a paper titled

IEEE

- Dr. Bipin Kumar Rai, Professor, Department of CSE has published a scopus indexed conference paper "Leveraging 3D Faster R-CNN for 3D Dental X-ray Restoration and Treatment Identification" In Computing and Machine Learning. CML 2024. Lecture Notes in Networks and Systems, vol 1108. Springer, Singapore. https://doi.org/10.1007/978-981-97-6588-1_19

- Dr. Bipin Kumar Rai, Professor, Department of CSE has published a scopus indexed conference paper "Heart Disease Prediction Model Using Machine Learning Techniques" In Computation of Artificial Intelligence and Machine Learning. ICCAIML 2024. Communications in Computer and Information Science, vol 2184. Springer, https://doi.org/10.1007/978-3-031-71481-8_23



Home > Computing and Machine Learning > Conference paper

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

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

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

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

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

74 Accesses

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

Heart Disease Prediction Model Using Machine Learning Techniques

Conference paper | First Online: 25 September 2024
pp 290–301 | Cite this conference paper

Bipin Kumar Rai, Aparna Jha, Shreyal Srivastava & Aman Bind

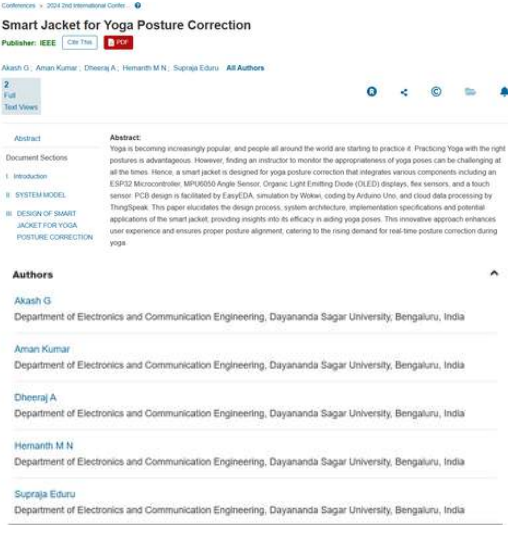
Part of the book series: Communications in Computer and Information Science ((CCIS,volume 2184))

Included in the following conference series: International Conference on Computation of Artificial Intelligence & Machine Learning

3 Accesses

Department Of Electronics and Communications Engineering

- ECE Department students Akash G, Aman Kumar, Dheeraj A, and Hemanth M N, under the guidance of faculty member Supraja Eduru, presented a paper titled "Smart Jacket for Yoga Posture Correction" at the 2024 2nd International Conference, published by IEEE ICNEWS 2024. This innovative project addresses the growing demand for accurate posture correction in yoga practice. The smart jacket they developed integrates an ESP32 microcontroller, an MPU6050 angle sensor, and an OLED display to monitor and provide feedback on yoga poses, aiding users in achieving correct postures independently. This research exemplifies the department's commitment to fostering practical and impactful technological solutions.



Conferences > 2024 2nd International Confer...

Smart Jacket for Yoga Posture Correction

Publisher: IEEE Cite This PDF

Akash G ; Aman Kumar ; Dheeraj A ; Hemanth M N ; Supraja Eduru **All Authors**

2 Full Text Views

Abstract

Document Sections

I. Introduction

II. SYSTEM MODEL

III. DESIGN OF SMART JACKET FOR YOGA POSTURE CORRECTION

Abstract:

Yoga is becoming increasingly popular, and people all around the world are starting to practice it. Practicing Yoga with the right postures is advantageous. However, finding an instructor to monitor the appropriateness of yoga poses can be challenging at all the times. Hence, a smart jacket is designed for yoga posture correction that integrates various components including an ESP32 Microcontroller, MPU6050 Angle Sensor, Organic Light Emitting Diode (OLED) displays, flex sensors, and a touch sensor. PCB design is facilitated by EasyEDA, simulation by Wokwi, coding by Arduino Uno, and cloud data processing by ThingSpeak. This paper elucidates the design process, system architecture, implementation specifications and potential applications of the smart jacket, providing insights into its efficacy in aiding yoga poses. This innovative approach enhances user experience and ensures proper posture alignment, catering to the rising demand for real-time posture correction during yoga.

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Departmental Activities

Department of CST

- Department of Computer Science & Technology arranged an expert talk on “Elevate Funding for Innovative Ideas” on 30th October 2024 at 11:00 AM to 01:00PM for 5th semester students. Session was delivered by Mr. Sathyanarayana B V, CEO of DERBI Foundation, Dayananda Sagar University. This session created awareness among students in fostering their ideas to product development and participate in various upcoming events.

Department of CSE

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


Smart-Segregation of Waste Management Using IoT

Publisher: IEEE

Alerts

Abstract

Abstract:
In response to the escalating challenges in contemporary waste management, our project introduces the Smart-Dustbin-an innovative solution designed to revolutionize traditi... View more

▼ Metadata

Abstract:
In response to the escalating challenges in contemporary waste management, our project introduces the Smart-Dustbin-an innovative solution designed to revolutionize traditional waste disposal practices. In densely populated urban areas, the surge in waste generation has outpaced the capabilities of conventional methods, leading to environmental and health hazards. Acknowledging this urgent need for transformative measures, the Smart-Dustbin leverages advanced technologies, including servo motors, ultrasonic sensors, and wireless communication modules. This intelligent system aims to optimize waste segregation, streamline collection routes, and provide real-time data insights for informed decision-making. To address the inefficiencies in existing waste management systems, our Proposed work the integration of cutting-edge technology as a pivotal element in waste disposal. We aim to test the efficacy of the Smart-Dustbin in enhancing waste segregation practices, ultimately contributing to a more sustainable and eco-friendlier urban environment. The Proposed methods include the implementation and analysis of the Smart-Dustbin prototype in real-world scenarios, gauging its performance against established waste management benchmarks. This project signifies a crucial step towards a future where technology intersects seamlessly with environmental responsibility to mitigate the complexities posed by escalating waste issues.

Published in: 2024 Ninth International Conference on Science Technology Engineering and Mathematics (ICONSTEM)

Date of Conference: 04-05 April 2024

DOI: 10.1109/ICONSTEM60960.2024.10568703

Department of CST

- Ms. Nandhitha N (ENG21CT0027) of 7 th semester CST got selected in Infosys Campus Placement Drive organized by Department of Training and Placement on 30 th October 2024.

2K24 Convocation Report

- The 8th Convocation Ceremony of Dayananda Sagar University took place on October 28, 2024, at the university's grand auditorium, beautifully decorated to honor the achievements of the graduating batch. The ceremony included Doctoral, Master's, and Bachelor's degree recipients, ready to embark on new career paths.

- The convocation commenced with a solemn academic procession. Leading the procession was the Mace Bearer, followed by the members of the Academic Council, Board of Governors, Registrar, Pro Vice Chancellor, Vice Chancellor, Pro Chancellor, Guest of Honour, Chief Guest and finally, the Chancellor. The graduates and attendees rose from their seats to welcome the procession, which concluded with the playing of the Nadageethe at 5:10 PM.

- Procession and Dignitaries: The academic procession included university leaders and esteemed guests, led by the Mace Bearer. Distinguished guests Prof. Debabrata Das (Chief Guest) and Mr. Jonas Brunschwig (Guest of Honour) graced the occasion.

- Speeches and Declarations: The Vice Chancellor welcomed attendees, the Chancellor declared the convocation open, and speeches from the Chief Guest and Guest of Honour motivated the graduates.

- Conferring of Degrees: The Chancellor formally conferred degrees across disciplines, including Arts, Sciences, Management, Engineering, and Health Sciences.

- Celebrations and Symbolic Gestures: Balloon and pigeon releases symbolized hope and new beginnings, followed by a laser light show and fireworks.

- The ceremony ended with a Vote of Thanks, the National Anthem, and a formal recess of the procession. This event marked a cherished milestone for the graduates, symbolizing their readiness to face new challenges with the knowledge and values they gained at DSU.


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SCHOOL OF ENGINEERING

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