

Department of Computer Engineering K.K. Wagh Institute of Engineering Education and Research, Nashik. TECHTIMES

News Letter A. Y. 2023-2024 SEM I

Panel Discussion on "Carrier
Opportunities in Computer
Engineering, Artificial Intelligence and
Data Science & Computer Science and
Design"



Department of Computer Engineering of K. K. Wagh Institute of Engineering Education and Research, Nashik had organized a Panel Discussion on "Career Opportunities in Computer Engineering, Artificial Intelligence and Data Science & Computer Science and Design Engineering" on 15th July 2023. Aspirants from various departments joined the meeting. The Discussion started with welcome by Ms. Sakshi. Prof. Dr. S. M. Kamalapur shed light on the progress and achievements of the Department. Ms. Riva and Mr. Aditya introduced the esteemed panelists, Mr. Abhishek Agrawal, Mr. Anand Mahuli, Mr. Swaraj Joshi, Ms. Mahima Gaikwad. Later, experts shared insights into opportunities in Computer Science, Artificial Intelligence and Data Science, Computer Science and Design Engineering, and their industry experiences. They emphasized on growing demand for computer science professionals and the importance of strong programming skills. They also highlighted potential in AI and Data Science, leveraging big data and machine learning for data-driven decision-making and shared insights on integrating Computer Science and Design Engineering to create user-centric solutions. The discussion inspired attendees to pursue tech interests, embrace challenges, and contribute to shaping the future.

Prof. Dr. S. S. Sane delivered guidance session on Implementation of NEP - 2020 on 12/7/2023 for K. K. Wagh Agri & Agri Allied Colleges, Senior Collcge, Nashik, Fine Art College and Performing Art College in Dr. Punjabrao Deshmukh Hall.



One week of Virtual National Level Faculty development program on "CLOUD INFRASTRUCTURE (AWS)"



One week of Virtual National Level Faculty development program on "CLOUD INFRASTRUCTURE (AWS)" was organized by Department of Computer Engineering, KKWIEER in association with AICTE, Ministry of Education, AWS and Brainovision Solutions India Pvt Ltd. Hyderabad, from 21st to 25th August 2023.,Time: 7.00pm to 8.00pm. Nearly 30000 participants attended the FDP all over India. The said FDP received the Indian Book of Records award. 79 participants were present for host institute K. K. Wagh Institute of Engineering Education and Research, Nashik. As a Host College, our active involvement was pivotal in ensuring the success of this prestigious event.



Our institution played a pivotal role in organizing and promoting the FDP, contributing significantly to the professional development of faculty members nationwide. By collaborating with external partners like Brainovision Solutions India Pvt. Ltd., the host college was at the forefront of delivering a transformative and impactful learning experience for faculty members from diverse colleges and universities.

The event was inaugurated at the hands of Mr. Buddha Chandrashekhar, CEO, AICTE, Dr. Ganesh Nag and the resource persons were Ms. Yasaswi from Brainovision. The FDP was coordinated by Dr. Y.D. Bhise, Prof. D. M. Kanade under the guidance of Head of department Dr. S. S. Sane.



Karan Batavia, Vishal Borse, Om Patil, Prathamesh Dharmadhikari, Parimal Thakre, Sai Patil, students of Computer Engineering and Prof.Priya Rakibe, mentor for being selected from appx. 40k teams all over the India for Grand finale and outstanding performance @ grand finale of National Level 36 hours Hackathon competition Kavach 2023 organized by MoE's Innovation Cell,AICTE along with Bureau of Police Research and Development (BPR&D) (MHA) and Indian Cybercrime Coordination Centre (I4C)(MHA) at Greater Noida,Uttar Pradesh. ****Congratulations**** Patent Published by Prof. Dr. S. S. Banait, Dr. Prajakta Sachin Vispute, Prof. Sanjay Anil Agrawal, Prof. Rucha Abhishek Agrawal, Prof. Archana S. Banait Date of filing of Application: 16/07/2023 Publication Date: 18/08/2023 Title of the invention: Machine Learning Based Gradient Boosting Regression Approach For Wind Power Production Forecasting

Prof.Priya Rakibe alongwith BE students from KAVACH 2023 visited IIT Delhi on 11th August 2023



Prof. Ganesh Jadhav, Hon. Shri. Sameer Wagh, Prof. Kardlie, Prof. Dr. S. S. Sane attending International Conference Sakal Educon Finland on the topic higher education in Finland between 3rd to 8th September 2023





On 16th September, 2023, one day Internal Smart India Hackathon 2023 was organized by the K.K. Wagh Institute of Engineering Education and Research, Nashik in association with Institutions Innovation Council (IIC). Total 76 teams have been participated in Internal SIH 2023 from entire College.



Prof. Priya Dinkar Rakibe delivered expert talk on Innovation Opportunities and hackathons- how to? On 27th Sept. 2023 at Sanjivani College of Engineering, Kopargaon



A Design Thinking Workshop for the course 'Design Thinking'



A Design Thinking Workshop for the course 'Design Thinking' was conducted on 17th and 26th October 2023, organized by the Department of Computer Engineering, K. K. Wagh Institute of Engineering and Education Research, Nashik, and CSI Students Branch, KKWIEER Nashik. We had a hands-on Design Thinking workshop in a live class with the SE students of the Computer Engineering and computer science and Design Engineering course. In this workshop, we conducted activities such as Brainstorming, prototyping and various other games related to the Design Thinking Applications. The activity was coordinated by Prof. Dr. Yogita Bhise, from the Computer Engineering Department, under the guidance of Head of Department Prof. Dr. S. S. Sane. Ms. Aditi Avhad, Ms. Mrunal Bagal, Mr. Chinmay Kotkar, Mr. Aditya Date, Mr. Karan Patel and other core members of CSI Students Branch helped coordinate the event. A grand total of 190 students, drawn from both participating departments, derived immense value and benefits from their active involvement in this enlightening and enriching workshop.

A mini project competition for the course 'Database Management System Lab'



A mini project competition for the course 'Database Management System Lab' was conducted on 28th October 2023, organized by the Department of Computer Engineering, K. K. Wagh Institute of Engineering and Education Research, Nashik, and CSI Students Chapter, KKWIEER Nashik. The judging panel consisted of Manas Joshi Software Developer at Perennial Systems, Mihir Palav Data Engineer at Growmark, and Shreyash Kalvankar Software Developer at Dalton Maag Ltd, all alumni of KKWIEER. A total of 46 groups participated (184 students), and the first 3 winners were declared.



The projects featured a wide array of innovative ideas, including Health Data Management, Ecommerce Website, Blog Management System, Tech Term Guesser (Technical Word Puzzle Game), Vehicle Parking Management System, Medigo, TraderPearl (A Stock Market Alliance), AI SaaS Chatbot, Popcornflix (A Movie Recommender System), and Restaurant Management. The judges commended the students' outstanding work and creativity in these domains. The activity was coordinated by Prof. S. K. Gondhalekar, Prof. Dr. Yogita Bhise, and Mrs. Manisha Shevale from the Computer Engineering Department, under the guidance of Head of Department Prof. Dr. S. S. Sane. Ms. Aditi Avhad, Ms. Mrunal Bagal, Mr. Chinmay Kotkar, Mr. Aditya Date, and other core members of CSI Students Branch helped coordinate the event.



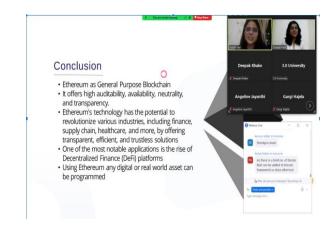
Prof. Dr. S. S. Sane invited speaker at "Elsevier Connect" Program at Courtyard Marriott, Nashik on 5th October 2023.



Dr. Y.D. Bhise invited as panelist "Elsevier Connect" Program at Courtyard Marriott, Nashik on 5th October 2023



Prof. Chaitali Patil along with 3 students- Sanjita Jain, Samyak Lahire, Rupprashik Khare of third year computer Engg. visited Google office at Banglore, Karnataka on 19th Oct. 23 at 12.30 pm. Visit was graciously hosted by Mr. Mohit Jain , Engineering Manager, Google. Mohit gave a tour of the 6 floors of Google office and had wonderful discussion about, the projects and research done at Google, Google's Work Culture and facilities offered by Google to its employees, the Perks of Being a Google Employee, Coordination of Teams from different Locations and many more fascinating aspects of life at Google. It was an eye-opening experience for students to see how a tech giant like Google operates and how they value both innovation and the rich history of technology. By this visit students found motivation to pursue careers in prominent corporations like Google.



Prof. C R Patil was invited by 3.0University to deliver the online session in the free knowledge sharing sessions for blockchain enthusiasts on Monday 16th Oct. 23, The topic for her talk was "Unleashing the Power of Ethereum"





Prof. C R Patil was invited as an Expert for delivering the expert session in the workshop "Emerging Technology-Blockchain and Its Applications". She delivered the session on "Blockchain Beyond Cryptocurrency" on 13th Oct. 23 for Computer and IT Engg. students and staff members.



During the period from July 17th to October 3rd, Yash Mahale, BE Computer Engg. student had the privilege of working with ABB as part of team Gyansanchit on the "Tantra Nayate Digital Tracking Website" project for the ABB Project Competition. In collaboration with his team, he contributed to the design, development, and implementation of this innovative digital tracking solution, and won the 1st prize. An expert talk on the topic Data structures in Blockchain and Metavers



An expert talk on the topic "Data structures in Blockchain and Metavers" was conducted on 4th Nov. 2023 at 11.30pm to 12.30pm in JVN hall of the Computer Engineering dept., K. K. Wagh Institute of Engineering and Education Research, Nashik Talk was organized under Debuggers Club activity. The session was conducted by Ms. Dhamnashri Tambe - Nawale, founder of the startup Mind Perceptor, Metaverse consultant for a company USTech and works full time for xplor Technologies as Mobile Lead. She started a talk by introduction to Metaverse, blockchain, shown the demo of projects like Banking in Metaverse, Fashion Industry etc. and then talked about Data structures used in those fields. Different Career Opportunities, certification etc. She offered the Internship opportunity for the interested students. Students enjoined the interactive session and around 100 students and staff members attended this session. The session was coordinated by Prof. C. R. Patil, Prof S. T. Patil and Prof. S k Gondhalekar, Computer Engg. Dept., under the guidance of Head of Department Prof. Dr. S. S. Sane. Master Rupprashik Khare worked as the student coordinator for the same. Ms. Sakshi has given the introduction of the expert and vote of thanks on behalf of the department.



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An expert talk on Importance of Java in Industry



An expert talk by Alumna-Manas Joshi Software Developer at Perennial Systems, Pune was conducted for Second Year Computer Engineering students on Importance of Java in Industry on 8th November 2023. Total 131 students attended the same. Objective of the expert talk was to get students familiar with importance of Java in current software industry and its applications. He explained the need of Exception handling in industry and how the problems are handled using the concepts. It was an interactive session and students were able to understand the needs of industries. Prof. N. M. Pagare and Prof. M. P. Mahajan coordinated the same.

A Industrial Visit at Sumago Infotech Pvt Ltd was conducted on 4th November 2023, organized by the Department of Computer Engineering



A Industrial Visit at Sumago Infotech Pvt Ltd was conducted on 4th November 2023, organized by the Department of Computer Engineering, K. K. Wagh Institute of Engineering and Education Research,

Nashik, and CSI Student's Chapter, KKWIEER Nashik. During the visit, the students had the invaluable opportunity to witness firsthand the intricate processes and cutting-edge technologies employed by Sumago Infotech Pvt. Ltd. Engaging presentations were delivered by seasoned professionals, offering insights into the latest trends in software development. Notable speakers included the company's CEO, Ms. Sonali Gorade, who shared her experiences and industry knowledge, inspiring the students with her vision for the future of technology. Interactive sessions and Q&A forums allowed the students to delve deeper into their areas of interest, enhancing their understanding of various IT domains and career pathways. In addition to the enriching learning experiences, the visit also opened doors to potential internships and job opportunities for the students. They had the chance to network with Sumago Infotech Pvt. Ltd's team members and explore internship programs tailored to their skill sets and interests. A total of 60 Students from Computer Engg., CSD and AIDS were given the opportunity to visit. The activity was coordinated by Prof. Dr. Yogita Bhise and Ms. Poonam Shete from the Computer Engineering Department, under the guidance of Head of Department Prof. Dr. S. S. Sane. Ms. Aditi Avhad, Ms. Mrunal Bagal, Mr. Chinmay Kotkar, Mr. Aditya Date, and other core members of CSI Students Branch helped coordinate the visit.

Seminars/Workshop/Training attended by staff:

- Prof. Dr. S. S. Sane attended International Conference Sakal Educon Finland on the topic higher education in Finland from 3rd to 8th September 2023.
- Prof. P. P. Vaidya, Prof. J. R. Mankar, Prof. M. P. Mahajan, Prof. S. T. Patil attended STTP on Data Science for Business organized by VIIT, Pune from 4th to 8th September 2023.
- Prof. Dr. Y. D. Bhise attended NPTEL FDP on Ethics in Engineering Practice, Research Methodology, Faculty coordinator for 21 Days Masterclass on Python Programming by Pantec, Online Course on Design Thinking by Great Learning Academy from November 2023.
- Prof. Dr. S. S. Banait, Prof. P. P. Vaidya, Prof. J. R. Mankar, Prof. M. P. Mahajan, Prof. S. S. Bhandare attended Two days national level FDP on Research Writing and application process by NFED from 25th and 26th November 2023.



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Papers Presented by Staff and Student

Title of Paper: SLDEB: Design of a Secure and Lightweight Dynamic Encryption Bio-Inspired Model for IoT Networks

Author: Bhavesh Kataria, Harikrishna B. Jethva, Pushpmala Vijay Shinde, Satish S. Banait, Farhadeeba Shaikh, Samir Ajani

Abstract: Designing encryption models for IoT deployments requires analysis of multiple network level constraints. These include, estimation of energy requirements, security strength, encryption & amp; decryption delay, computational complexity, etc. A wide variety of models are proposed to perform these tasks, but most of them are either highly complex, or require higher energy levels for encrypting data samples. Moreover, these models are contextindependent, and cannot be used for applicationspecific deployments. To overcome these issues, this text proposes design of a novel secure and light weight dynamic encryption bio inspired model for IoT networks. The proposed model initially uses an Elliptic Curve Cryptography (ECC) process for data security, and optimizes its performance via Bacterial Foraging Optimization (BFO). ECC parameters that are obtained via BFO are further fine-tuned using a Q-Learning based process, which assists in identification of context-specific parametric ranges for different network types. The combination of BFO with Q-Learning results in dynamic ECC curves, which can be used for context-specific deployments. Performance of the model was evaluated on different scaled networks, and compared with other state-ofthe-art encryption models in terms of encryption delay, decryption delay, security level under different attacks, and energy consumption levels. Based on this comparison, it was observed that the proposed model showcased 8.5% lower encryption delay, 3.2% lower decryption delay, and 5.9% lower energy consumption while maintaining similar security levels. Due to these enhancements, the proposed model is useful for a wide variety of low complexity IoT deployments.

Title of Paper: Blockchain Based Customized Certificate Generation and Verification

Author: Prof. C. R. Patil

Abstract: In FY22, the number of universities in India stood at 1113 with 42343 colleges. The total number of enrollments in higher education has also steadily increased. Degrees play the most important role in the academics of any candidate, be it a UG / PG student or a research, etc. But the authenticity of the certificate is another important aspect. Blockchain technology makes the shared ledger concept of a distributed system a reality for many application areas. It is essentially a decentralized approach that provides transparency of transaction data. To find certificates, documents, transcripts, everything must be principles confidentiality, digitized with the of immutability, reliability and availability. All of this can be achieved through blockchain. In this article, we introduce a blockchain-based certificate generation and verification system. The system will consist of three modules: generate, upload and verify. Each certificate has a unique hash key that is used to access and verify the certificate or document. The proposed system will solve the problem of false certificates and the maintainability of documents will be improved. The generated digital certificate is antiforgery and easy to verify. As it is blockchain-based, the generated documents cannot be edited or modified.

Faculty Coordinator: M. P. Mahajan Publisher: Department of Computer Engineering, K. K. Wagh Institute of Engineering Education and Research, Nashik <u>https://engg.kkwagh.edu.in/academic_programme/news_letter/1</u>