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Felicitation of REGULAR retired staff members

Felicitation program for regular Retired Staff

Felicitation program for regular retired staff on occasion of 125th birth anniversary of Padmashree Late Kakasaheb Wagh was organized on 3rd April 2023 at Mahakavi Kalidas Kalamandir, Nashik. Around 95 staff members retired from various institutes run by K. K. Wagh Education Society were felicitated at the hands of Dr. D. M. More (Ex. Director General, MERI Nashik). For the program Hon Chairman Shri. Sameer Wagh, Secretary Prof. K. S. Bandi, Principal Dr. K. N. Nandurkar, Dr. V. D. Barve, Ex-Principals and Heads of departments and staff of various institutes of K. K. Wagh Education Society were present.

Guidance session for FE teachers by Hon. Vivek Sawant

Guidance session for FE Teachers by Hon Vivek Sawant

On 20th April 2023, guidance session for FE Teachers by Hon. Vivek Sawant was organized. Chairman, Shri. Sameer Wagh felicitated Hon. Vivek Sawant on this occasion. Hon. Vivek Sawant guided all the FE Teachers about the use of LMS system in teaching – learning. For the meeting Principal Dr K. N. Nandurkar, all Deans, Heads of department and FE Teachers were present. Also an ETT Meeting was conducted in afternoon with Hon. Vivek Sawant. Hon. Vivek Sawant guided about drafting of the syllabus under Autonomy.

Felicitation of Placed Students

Felicitation program of placed students

The Felicitation program of final year students placed through Campus placement was organized on 1st April 2023 by our institute at Aurangabadkar Sabhagruh, Sarvajanik Vachnalay, Nashik. Felicitation was done by the hands of Principal Dr K. N. Nandurkar, Deans and Heads of department of our institute. Around 100 final year placed students were felicitated in the program. Family members of placed students also attended the function. They appreciated the efforts taken by college for training the students and providing opportunities for exciting career.

Karmaveer EXPO 2023

The Department of Electrical Engineering of K. K. Wagh Institute of Engineering Education and Research has organized IET Karmaveer Expo 2023 on 29th April 2023. The event was inaugurated with the hands of Hon. Shri. Mukul Srivastava, President, Power Division,

Crompton Greaves Ltd. Nashik in the presence of Hon. Chairman Shri. Sameer Wagh, Trustee Hon. Shri. Ashokbhai Merchant, Principal Dr. K. N. Nandurkar and project evaluators Dr. Omprakash Kulkarni, Mr. John Yeshuraj and Shri.PiyushShinde. During the inauguration, Shri.Mukul informed students that the IET Karmaveer Expo is the platform for the promotion of start-ups and entrepreneurial culture in the students. Principal Dr. Nandurkar presented the achievements of the institute. Dr. Omprakash Kulkarni guided the student participants about the assessment criteria of the project evaluation. Dr. B. E. Kushare provided an overview of the whole event. After the inauguration, the project exhibition was opened for all the visitors. The prize distribution ceremony of the IET Karmaveer Expo held on the same day (29 April 2023) at 5 PM. Hon. Mr. Dhananjay Joshi working as a Deputy General Manager in Mahindra & Mahindra Company was the chief guest, while Dr. Omprakash Kulkarni, Mr. John Yeshuraj, Shri Piyush Shinde were examiners of the event. Chief Guest Mr. Dhananjay Joshi, Principal Dr. K. N. Nandurkar, Head of Department, Dr. B. E, Kushare, distributed the prize.

Student Participation in National Level Project Competition as below

Students participated from Nashik	Students Participated from Maharashtra	Students Participated from Other States	Total
221	27	06	254

The total no of students who participated in the Poster Competition was 21. The total no of students participated in Photography Competition was 6. Total prize was Rs 40000/- given for winners of various competitions. The results of this competition are as follows:

■ **National Project Competition:**
First Prize: Was awarded to the project, 'LoRa-based vehicle speed and location tracking system to reduce accidents on urban and highway roads'. This project was presented by students Shoaib Killedar, Pranav Hemadri, Tanisha Patil, and Rashmi Hitemath from Basaveshwar College of Engineering, Bagalkot, Karnataka.
Second prize: Was awarded to the project, 'Foot Mouse'. This project was presented by Somnath Ramteke, Mayur Depura, Yojana Mahajan, and Purva Patil from S. S. B. T. College of Engineering, Jalgaon, Maharashtra.
Third Prize: Was awarded to this project, 'Design of vacuum seed drill for agricultural purpose'. This project was presented by students Shreyash Prayag, Vishal Bagul, Naresh Shinde, and Swapnil Suryavanshi from KKWIEER Nashik.

■ **Poster Competition:**
First Prize: Rishikesh Rehare, from KKWIEER Nashik.
Second Prize: Shraddha Kutuhal, Sandeep University, Nashik
Third Prize: Nayan Tayde, Shramsadhana College of Engineering, Jalgaon

■ **Photography Contest:**
First Prize: Prasad Bhojane, from KKWIEER Nashik.
Second Prize: Krishna Sarode, HIL College of Science and Commerce, Nashik

■ **'Supervisory Development Program' for Mahindra and Mahindra Ltd., Igatpuri**

Certificates distribution by the hands of Shri. Rajesh Khanolkar

A 'Supervisory Development Program' for employees of Mahindra and Mahindra was conducted by K. K. Wagh IEER, Nashik during April 2022 to December 2022. Upon successful completion of this training program, a valedictory function was organised at K. K. Wagh IEER, Nashik on 9th April 2023. On this occasion, Shri Rajesh Khanolkar, Plant Head, Mahindra and Mahindra Ltd., Igatpuri, Dr. K. N. Nandurkar, Principal, K. K. Wagh IEER, Nashik, Dr. P. J. Pawar, Professor and Head, Production Engineering, Shri. Rajendra Shewale, Head

Manufacturing, and Shri. Sandeep Gajare, ER Head, Mahindra and Mahindra Ltd., Igatpuri, were present for this function. Shri Rajesh Khanolkar appreciated the efforts taken by K. K. Wagh Institute for conducting the training workshop and enhancing the skills of their employees. In this function thirty participants were awarded a certificate at the hands of Shri. Rajesh Khanolkar and Principal Dr. K. N. Nandurkar. Mr. Khanolkar and his team also visited the AICTE Idea Lab and appreciated the projects done by our students.

F. Y. B. Tech. Project Competition

Inauguration of Project Competition

Valedictory of Project Competition

Group Photo graph of participants of Project Competition

AICTE IDEA Lab of our institute has organized Project Competition for F. Y. B. Tech. Students on 8th April 2023. Around 300 students of F. Y. B. Tech. participated in the project competition. Mr. Prashant Bachchav and Mrs. Sujata Bachhav (Experts and Chief Guest of Inauguration) judged the projects and guided the students. On this occasion Principal Dr K. N. Nandurkar addressed

to the participants. Mr. Manohar Shete (Chief Guest of Valedictory) distributed prizes to winners and guided the students. Project Competition was intended to provide participants with hands on practice on advanced equipment in AICTE IDEA Lab. Also, it provides opportunity to participants to work in team, build integrity and work in multidisciplinary fields. This project competition throws light on successful implementation of various new technologies to prepare project and enhances technical skills. A poster competition was also conducted alongwith project competition to represent how AICTE IDEA Lab facility will help them to complete their projects. The Project Competition was coordinated by Dr. R. K. Munje, Mrs. P. R. Mogal and AICTE IDEA lab staff.

Departmental Events

Various department of our institute organized the Competitions for the students to develop their co-curricular and extracurricular skills. Below table shows the various technical and nontechnical events organized by the department with date and number of students participated in the events

Sr. No.	Name of Department	Name of event	Date	Number of participants
1.	Robotics & Automation	Infinity 2K23	28th and 29th April 2023	140
2.	Chemical	Chemfest2K23	28th April 2023	160
3.	Computer & CSD	Equinox 2023	28th April 2023	370
4.	Mechanical	Mecheaven 23	28th April 2023	80
5.	AI & DS	Celesta 23	29th April 2023	250
6.	Electrical	Karmaveer Expo	29th April 2023	281
7.	MCA	Ascend 2K23	29th April 2023	322
8.	MBA	Maverick 2023	29th April 2023	300

'EQUINOX 2023'

Inauguration of 'Equinox 2023'

The event 'Equinox 2023' was organized by Computer and CSD Engineering Department on 28th April, 2023 in association with CSI Students' Branch and Debuggers Club. The Equinox poster release followed by the inauguration of the event

was done by Prof. Dr. S. S. Sane, Head Computer and CSD department. The inauguration ceremony took place at 10 am in the UNIX lab in presence of the faculty coordinators Prof. Smita Patil, Prof. Chaitali Patil and all the faculty members of Computer and CSD department. It had over 400 participants in all from which 300 participants were from KKWIEER and 100 participants from other colleges around Nashik, Pune and Mumbai. It included 5 events namely Furious Finders, Shutterbug, Web-Battles, Ideathon, Project Wars

■ CELESTRA 2k23

Inauguration of "CELESTRA 2k23"

On 29th April 2023, the Department of Artificial Intelligence and Data Science organized "CELESTRA 2k23", a National level Technical Symposium in K.K.W.I.E.E.R, Nashik.The Event was inaugurated by Ms. Shilpa Shetty (Manager, Datamatics Bupa, Nashik) and Mr. Ganesh Jadhav (Software Quality Analyst, Kleton Tech, Gurgaon) along with Head of Department Prof. Dr. S. S. Sane. As part of "CELESTRA 2k23", a variety of competitions were held, including a Debate Competition, A UI Design Competition, and an Innovative Idea competition. 300+ students from different colleges all over Nashik participated in the various events of "CELESTRA 2k23". The competition was judged by eminent Judges from a variety of industries and colleges. The event was organized by the Phoenix Club of the Department of Artificial Intelligence & Data Science.

■ INFINITY 2K23

Students Association of Robotics & Automation (SARA) organized a competition INFINITY 2K23 on 28th & 29th April 2023. The prizes were distributed on 29th April 2023. The total students participated in various events are 140. Overall the event was grand success.

Inauguration of Infinity-2k23

■ CHEMFEST - 2K23

ChemFest-2k23 valedictory function

On 28th April 2023, the Department of Chemical Engineering organized "ChemFest2k23", a National level Technical Symposium in K.K.W.I.E.E.R, Nashik.The Event was inaugurated by Dr P. G. Pangarkar Ex-Professor ICT Mumbai. As part of "ChemFest2k23", a variety of competitions were held, including a Paper Presentation, Poster Presentation and Inno Model Exihibition. 150+ students participated in the various events of "ChemFest2k23". The prize distribution ceremony was organized at evening on same day. The Chief guest for prize distribution ceremony was Mr. B. Sitharaman, Director of BSR Technology Nashik.

■ INDIA Partnership Forum

Team interacted with expert of Glasgow Caledonian University (UK)

Director Prof. Dr. K. N. Nandurkar along with HOD (Computer Engineering) Prof. Dr. S. S.

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Sane, I/C head of electrical department Prof. Dr. R. K. Munje attended India Partnership Forum organized by Cormack Consultancy Group in Pune on 18th April 2023. Team interacted with expert of Glasgow Caledonian University (UK) for several opportunities for collaboration with K. K. Wagh Institute of Engineering Education and Research, Nashik.

■ E-WASTE Collection Drive

From left, Mr. Abhay Kulkarni handing over the prize.

Our institute was felicitated for contributing prominently in e-waste collection drive at CSI Nashik Chapter Foundation Day on 27th April 2023. Around 10 refurbished computer systems were donated to Social Organizations and Schools. Prof. Dr. S. S. Sane (Head of Computer Engineering) received the prize on behalf of the institute.

■ Expert Lecture/Seminar/Courses/Workshop Conducted:

- Computer Engineering Department organized an expert talk on the topic "Cyber Security Tools" by Mr. Vaibhav Bhandari, Security Professor at Merritt College, Oakland CA and Director at Lib13 Inc USA on 17th April 2023 and an expert talk on "The Role of Computer Engineers in Industry and future Scope" by Mr. Sagar Nikam, ELC Nashik on 25th April 2023.

- Mechanical Engineering Department organized expert lecture on "Role of Fluid Power Engineering in today's industrial automation by Mr. Ganesh Ushir on 25/04/2023 and FDP on "Power sector technology and policy: Recent trends and entrepreneurship opportunities" by Dr G. N. Kulkarni, Dr Anand Rao and Dr Hirkudde, Er. Suyog Zute from 17/04/2023 to 21/04/2023.

- Civil Engineering Department has organized Expert Lecture on World Earth Day by Er. Vikrant Nikam, Albedo Foundation Nashik on 24/04/2023.

- Electrical Engineering Department has organized Expert Session on "Competitive Exam preparation" by Ms. PoonamAhireon 18/04/2023 and anexpert Session on "Electrical Safety and Prevention of Accidents" by Mr. ShriramGajananPande, Retired Assistant Engineer,MSEB, Nashik on 13/04/2023

- Dept. of Information Technology organized a session on "Women Health Awareness" by Dr. Swati Chavan, Program Officer (District Mental Health Program) at Civil Hospital Nashik & Consultant at Mann Sanjeevani Clinic Nashik on 6th April and asession on "Blockchain Technology" by Mrs. Sonali Gorade, CEO, Sumago Infotech Pvt., Ltd., Nashik on 13th April 2023.

- Robotics and Automation Department organized Expert Talk on topic of "PCB Design" by Mr. Chetan S. Jadhav, Hi-Q Electro Systems, Nashik on 01/04/2023 and Expert Talk on topic of "Supply Chain Management & Analytics" by Mr. Rohan U. Katkade, GXO Logistics Ltd; Nashik on 15/04/2023.

- Department of Applied Science has organized activity based expert talk on Topic "Communication Skills for Personality Enhancement" by the resource person- Prof. Samiksha Tewari on 1st April 2023 for the C and D division of Computer department and Saturday 15thApril 2023 for the J, L and N division of Civil, Mechanical and Electrical department, Expert talk on Topic "Engineering Edge in Competitive exams" by the resource person- Mr. Vishal Patil on 6th April 2023 for F and P division, E & TC and Robotics and Automation department and second session for on B, O, G and H division, Expert talk on Topic "Problem Solving Approach" by the resource person- Er. Shalak Joshi from Precise Vacuum System Nashik on 20th April 2023 for I, K and M division of Chemical, Civil and Mechanical department. Same department also organized an Expert talk on Topic "Entrepreneurship and Startups" by the resource person- Er. Vipin Asija (Heart fullness practitioner, Metallurgical Engineer from IIT Kharagpur) on 20th April 2023 for B and H division of the department of AIDS and IT. Expert talk on Topic "Electrical Safety" by the resource person - Mr. Jayant P. Khairnar, AMT Skill development training institute Nashik on 20th April 2023 for F, N and P division of the

department of E & TC, Electrical and Robotics and Automation and second session for G and O division of AIDS and Electrical department. Expert talk on Topic "Introduction to R and D" by the resource person- Mr. Sarvesh Sukhtme on21th April 2023 for on A and E division of the AIDS and CSD department.

■ Congratulations !!

Prof. S. R. Vhatkar, Assistant Professor of Civil Engineering successfully completed his Ph. D. under the guidance of Dr. P. D. Jadhao (Head of Civil Engineering). His research topic was "Performance evaluation of earthquake resistant steel frame associated with thin walled light gauge cold formed steel plate shear wall with semi – rigid joints".

■ Congratulations !!

Prof. A. V Tavare (Computer department of KKWIEER) recognized as a Faculty mentor for "AI for All" IUCEE certification course.

■ Congratulations!! Winners of DIPEX -2023

Students of Computer Engineering Shreyas Gangurde, Prathamesh Sujgure, Atharva Bhange and Gaurav Tajanpure won the prize for their project "Virtual Guide to Provide Immersive Experience Of *Goda Park Using VR" in DIPEX 2023 which was held during 7 to 9th April 2023. under guidance of Prof. Kushal Birla and Prof. Priya Rakibe.

Students of E&TC Engineering Abhishek Bahadurkar, Kashyap Malodeand Dnyanada Tikar won the prize for their project on " Sprinkler changer bot" in DIPEX 2023 which was held during 7 to 9th April 2023.

■ Other Achievements

- Principal Dr K. N. Nandurkar was invited as panelist by ELH Media under "HE Transformation Talks". The discussion on How Technology can help institutions in their journey towards excellence was organized in online manner on 3rd March 2023.

- Principal Dr. K. N. Nandurkar and Prof. V. N. Mawal also attended Annual Day program of CII Maharashtra State Council at Hotel President Mumbai and conference on "Accelerating Maharashtra @100: Empowering growth and sustainability, Innovation and Technology on 10th March 2023.

- Robotics and Automation Department Head Dr. P. J. Pawar delivered an expert session on topic "Fuzzy Logic Applications in Robotics" during Three Days Workshop on 'Recent Advances in Robotics' organized by Amrutvahini College of Engineering, Sangamner during 16-18 March 2023 which was sponsored by Robotic Society of India.
- Principal Dr. K. N. Nandurkar and Dr P. K. Shahabadkar visited to HAL Nashik to discuss about joint projects and internship for students.
- Prof. Dr. S. S. Sane delivered an expert talk on the topic "Data Science Significance and Application" under staff training academy on 16th April 2023 organized by Gokhale Education Society's College of Engineering, Nashik.

■ Abstracts of papers presented during March 2023
Effective Decision Making through Skyline Visuals

Dr. R. D. Kulkarni, Prof. Mrs. S. K. Gondhalekar& Prof. D. M. Kanade

(Presented paper in World Conference on "Artificial Intelligence: Advances and Applications)(WCAIAA 2023))

Abstract: During decision making the end user wish to make optimum choices from a larger space available. A skyline query proves helpful in this scenario. It is a powerful data summarization query which satisfies multiple user preferences presenting the user a precise set to take effective decisions. However as the size of the datasets and the number of user preferences increase, the resultant skylines become huge which diminishes the very cause behind such queries as the large skyline tend to be impractical to take effective decisions. In this paper we have addressed this issue by proposing the concept of 'skyline visuals'. The proposed visuals present the required skyline to the end user in a pictorial form assisting the end user to take best decisions. The skyline visuals also present the user various types of skylines exploring various other parallel scenarios available for decision making. The end user can also interact with the presented skyline to make more effective decisions. This feature of the skyline visuals enhance the user experience.

Keywords: Skyline Query; Data Visualization; Skyline Visuals; User Experience

■ Abstracts of papers presented during April 2023
Covid-19 Prediction from X-Ray Images using CNN

Damini Jadhav, Harshita Jagtap, Rujul Modi & Prof. Poonam Patil

(Presented paper in International Conference on Recent Advances in Engineering, Science and Technology (ICRAEST-2023) organized by Godavari Foundation's Godavari College of Engineering, Jalgaon)

Abstract: COVID-19 also referred to as Severe Acute Respiratory Syndrome Corona virus-2 (SARS-CoV-2) is a very contagious virus infection and has huge effect on global health. The virus is spread from infected person who talks, sneeze, or cough. The most standard method for diagnosing COVID-19 is RT-PCR, performing RT-PCR to detect COVID might be risky, but the X-rays are easiest way available used for detecting infections in the lungs. Using Artificial Intelligence (AI) techniques and convolutional neural networks (CNNs) have achieved fruitful results in medical image analysis and classification. This study suggests a CNN model using Tensor Flow for analysing chest X-rays to predict COVID-19 pictures. The study follows a flexible method of deep learning utilizing the CNN model for detection and prediction if a patient is impacted or not with the disease employing image of a chest X-ray. The trained model produced using Tensor Flow achieved anaccuracy rate of 97% during the performance training.

■ Minimizing cycle time and energy consumption for a multi-degree serial manipulator using teaching–learning-based optimization

Prof. Dr. P. J. Pawar

Abstract: Multiple inverse kinematic solutions are obtained for a multi-degree serial manipulator. Each solution provides a different cycle time and energy consumed to perform a

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given task in a particular sequence. Improper selection of inverse kinematic solution in a robotic assembly line may lead to an increase in not only overall cycle time but also energy consumption. Therefore, it is necessary to optimize the robot's performance with respect to cycle time and energy consumption simultaneously. These two objectives usually conflict due to joint motors' different operational speeds and energy consumption rates. Hence, in this work, an attempt is made to simultaneously optimize both cycle time and energy consumption by minimizing the differences in joint angles of the robot manipulator while moving from one position to another in applications involving multi-point movement of the robot end effector. The proposed approach is demonstrated by considering an example of a commonly used six-degree-of-freedom KukaKR5-A robot manipulator. It can be extended efficiently for any other robot manipulator. A relatively new algorithm known as teaching–learning-based optimization (TLBO) algorithm is employed to solve this problem. It is observed that the results obtained by TLBO show a significant reduction of about 20% and 10% for cycle time, while 3% and 15% for energy consumption over the results obtained by genetic algorithm (GA) and sequential quadratic programming (SQP), respectively.

- **Trajectory Optimization of an Industrial Robot Using Teaching–Learning-Based Optimization**

Prof. Dr. P. J. Pawar

Abstract: In this work, a teaching–learning-based optimization technique is applied to control the industrial robot arm trajectory based on an inverse kinematics solution with energy consumption minimization. The problem considers the minimization of energy consumption during the process sequence of six consumption during the process sequence of six degrees of freedom industrial robot. The assessment of energy criteria includes the computational modeling of the movement of the robotic arm. The considered technique is compared and validated on the industrial robot ABB IRB 1410 for trajectory optimization.

Glimpses of Karmaveer Expo