



K K Wagh Education Society's K K Wagh Institute of Engineering Education and Research, Nashik.

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■ Interaction with Indo-German Training Centre Officials

Mrs. Beena Nair, Director, and Mr. Vikas Malhotra, Manager, Indo-German training Centre, Mumbai visited institute on 9th October 2025. Mrs. Beena Nair informed about the programs, special courses and various activities run by their centre and useful for the engineering and management students/professionals. During the interaction Director Dr. K. N. Nandurkar, Dr. P. J. Pawar, Dr. P. B. Kushare, Dr. A. S Patil, Prof. M. J. Metkar and Dr. S. V. Kadbhane were present and discussed about the possible opportunities to KKWIEER students and staff by associating with the Indo-German Training Centre.



Presentation by Mrs. Beena Nair

■ Visit of KKWIEER Alumnus Mr. Yadnesh Bhor

Mr. Yadnesh Bhor, Validation Manager at German Railway, Germany, and an esteemed alumnus of the Mechanical Engineering Department (Batch 2018), visited institute on 14th October, accompanied by his spouse Mrs. Aishwarya Bhor, an alumnus of the Electronics Department. They interacted with students on the theme: "Gateway to Germany – Exploring Educational and Career Prospects". During the session, they provided valuable insights into higher education pathways, skill expectations, industry culture, and career opportunities in

Germany. Mr. Yadnesh also highlighted that his organisation is offering a 6-month internship opportunity for K K Wagh students, marking a significant step towards international exposure. Following the student interaction, Mr. Yadnesh Bhor held a meeting with Hon. Chairman Mr. Sameer Wagh, Dr. K. N. Nandurkar, and Dr. Pramod Shahabbadkar. The discussion focused on exploring collaborative areas, potential academic-industry partnerships, and expanding opportunities in Germany for K K Wagh students.



Visit of Mr. Yadnesh Bhor from German Railway, Germany

■ Global Education Conclave

On 7th October 2025, Dr. Keshav Nandurkar, Dr. Ravindra Munje and Dr. Darshan Medhane attended the 6th Edition of the Global Education Conclave organized by Confederation of Indian Industry at the Hotel Taj Mahal Palace, Colaba, Mumbai. Dr. Keshav Nandurkar was one of the panellist of the Panel Discussion. It was an insightful experience exploring ideas on transforming education through innovation, collaboration, and technology.



■ Mr. Mandar Khadilkar from USA

SaaS (Software as a Service) course, was conducted by Mr. Mandar Khadilkar, an accomplished Executive Leader with over 35 years of experience in the software industry. He holds several critical patents, including innovations in video streaming over mobile networks, service and device token-based authentication, and a parallel algorithm to the Paxos consensus protocol. Currently, he is the Founder and CEO of JustWhere.io — a one-of-a-kind platform focused on secure content sharing. The course was conducted in offline mode on the college campus over a period of two weeks.



■ Vachan Prerna Din

Kusumagraj Central Library celebrated “Vachan Prerna Din” on 15th October 2025. On this occasion, a tribute was paid to Dr. A. P. J. Abdul Kalam in the college central library. To help students in understanding his remarkable life and achievements, information about Dr. Kalam’s work and contributions was shared with them. On the same day, a Book Exhibition was organized in the Library to encourage reading habits among teachers, non-teaching staff, and students. The exhibition was inaugurated by Hon. Shri Shrikant Karode, A.M.T. Skill Enhancement Institute, Nashik. The Principal, Dr. K. N. Nandurkar, Dean Academics, Dr. Sunil Kute, along with students, teachers, and non-teaching staff, were present on this occasion. Mr. Shrikant Karode addressed the students and emphasized the importance of reading. A total of 212 participants, including students, teachers, and non-teaching staff, visited the book exhibition.



■ Send-off for Mrs. Seema Gondhalekar

On 31st October 2025, a send-off program for Mrs. Seema Gondhalekar, Faculty of the Computer Engineering Department, was held in the IQAC Hall on the occasion of her superannuation after 38 years of service. She elaborated on her journey in the institute, and Dr. K. N. Nandurkar and Dr. S. Y. Kute shared her contributions during her tenure. Felicitation was also organized by Computer Engineering Department in her honor.



■ Anniversary Program of Late Bhau



The Birth Anniversary of Late Hon. Balasaheb Wagh (Bhau) was celebrated on 19th October 2025. Pratima Pujan was carried out at the porch, and members paid tribute to Hon. Bhau. The main program was arranged at Pendol. The Chief Guest for the event was Hon. Mr. Chhagan Bhujbal (Minister of Food and Civil Supplies, Government of Maharashtra), and the Chairperson of the program was Hon. Mr. Balasaheb Thorat (Former Revenue Minister and Senior Congress Leader). The Chief Guest and the Chairperson fondly recalled and highlighted the cherished memories of Late Bhau, emphasizing his unwavering dedication in developing and shaping the KKW empire.

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■ Vijigisha 2025 – a State Level Elocution Competition

The ISTE Students' Chapter of K. K. Wagh Institute of Engineering Education and Research, Nashik, successfully organised Vijigisha 2025 – a State Level Elocution Competition – on 11th October 2025 at P. C. Ray Hall. The event saw enthusiastic participation from around 250 students across city, who presented powerful speeches in English and Marathi on contemporary social, technological and ethical themes. After a rigorous two-round format, the top 20 finalists impressed the judges with their spontaneity, clarity of thought and stage presence. The programme also included the felicitation of the outgoing ISTE committee (2024–25) and the installation of the new committee (2025–26), marking a vibrant beginning to the academic year. Vijigisha 2025 truly lived up to its spirit – “One voice with conviction is stronger than a thousand echoes.”



Winners of Vijigisha Competition

■ Shastra Pooja

On the occasion of Dussehra 2025, Shastra Pooja was performed by Dr. K. N. Nandurkar, Principal of K. K. Wagh Institute of Engineering Education & Research, Nashik in the main workshop of Institute. All the tools and equipments used in workshop were cleaned and displayed for the benefit of students.



■ Help for Om Sai & Welfare Association

On 3rd October 2025, a cheque of ₹10,000 was handed over to Mr. Ramdas Jagtap, General Secretary of Om Sai Welfare Association for the Blind and Disabled (India). The amount was collected by the staff of Engineering College to procure white canes for blind people on the occasion of White Cane day (15th October). Dr. K. N. Nandurkar, Principal was also present for distribution of white canes at Vairaj Kaladalan in Nashik.



■ Expert Lecture / Seminar / Courses / Workshop Conducted:

- The Civil Engineering department organized following sessions during October 2025:
- Expert session on “Plumbing Hydraulics” by Er. Milind Shete NEC Member and RD North on 1st October 2025.
- Expert session on “Principal and Working of various units of water treatment plant” by Er. Sumit Kashinath Bachhav 50 MLD WTP Plant In charge Nashik Municipal Corporation, Nashik on 11th October 2025.
- The Electronics and Telecommunication Engineering Department organized the following informative event in October 2025:
- A Guidance Session for Emerson and Fox Placement Drive was conducted by Ms. Anushka Varade, System Engineer, DeltaV Upgrade Department, Emerson, Nashik, on 6th October 2025 for B.Tech students.



- An Expert Talk on “Space Habitats and Life Support Systems” was conducted by Mr. Dilip Thakur, Head of Department of Physics and Member of Ashoka Astronomical Society, Ashoka Universal School, Nashik, on 8th October 2025.
- The Electrical Engineering organized following informative events in October 2025:
- Expert session on “IEC61850 Standard” by Mr. Vinayak Chavan, Technical Sales Support Specialist, ABB, Finland on 11th October 2025.
- Expert session on “Climate Change and the Common Man” by Mr. Nikhil Gaikwad Pursuing Master Degree at Germany on 15th October 2025.
- The Chemical Engineering Department organized the following informative events during October 2025:
- Mr. Dattatraya Aher has delivered an expert session on “Self Reliance for Youth Development” for First-Year Engineering Students on 8th October 2025.
- Mr. Chetan V. Patil has delivered an expert talk on “Process Modeling in Chemical Industries Using Ansys Fluent” on 9th October 2025.
- Ms. Hetansha Boricha (Alumni) delivered expert talks on GATE Awareness and, Research Prospects in CO2 Capture on 14th October 2025.
- Prof. V. G. Pangarkar delivered an expert talk on “Process Intensification” on 16th October 2025.
- The Robotics & Automation Engineering organized following Expert talk in Oct. 2025:
- An expert’s talk on “Future Technologies in Robot Design” by Mr. Satish Maniyar on 15th Oct. 2025.
- The Applied Science and Mathematics department organized following activity in October 2025:
- An expert talk on “Life is all Positivity and Negativity does not exist” by Mr. Deek Parassini, Abu Dhabi, UAE, and Founder of the LIAP Foundation on 7th October 2025.

■ **Expert Lecture / Seminar / Courses / Workshop attended: -**

- Computer Engineering staff Prof. M. P. Mahajan, Prof. N. S. Gaware and Prof. S. T. Patil attended One Week Online FDP on Agentic AI for a Smarter, Adaptive, and Responsible Future from 6th to 10th October 2025 organized by the Department of Computer Science & Engineering (AI & ML), Vishwakarma Institute of Technology, Pune. Prof. S T. Patil

attended online AICTE Training And Learning (ATAL) Academy Faculty Development Program on AI in Education organized by Abdul Razzak Kalsekar Polytechnic from 13th to 18th October 2025.

- Information Technology department staff Prof. Smita Nilesh Chaudhari and Dr. Yogita H. Khairnar successfully completed one week Faculty Development Program on “Advances in Augmented & Virtual Reality and Blockchain Technologies” organized by the Department of Computer Science & Engineering (IoT & Cyber Security including Blockchain Technology) and the Department of Information Technology of the Vishwakarma Institute of Technology, Pune, held from 29th September to 4th October 2025.

■ **Paper Publications/Presentations:**

Title: Enhanced X-ray image classification for pneumonia detection using deep learning based CBAM and SE mechanisms

Prof. Dr. (Mrs.) Swapnali N. Tambe (Published in Journal - Intelligence-Based Medicine on 1st October 2025).

Abstract: Problem considered: Pneumonia, a global health concern, remains a significant cause of morbidity and mortality, particularly in children under five and the elderly. Diagnostic challenges are pronounced in resource-limited settings, where expertise in radiological interpretation is scarce. X-ray imaging, a common diagnostic tool, often fails to provide accurate results without expert analysis. This gap in timely and precise diagnosis leads to delayed treatments and worsening patient outcomes. The emergence of antibiotic-resistant strains further emphasizes the urgency for innovative diagnostic solutions. Methods: This research integrates advanced attention mechanisms into convolutional neural networks (CNNs) to enhance pneumonia detection from X-ray images. Utilizing a dataset of 5816 X-rays, preprocessing steps included normalization and data augmentation to improve robustness. The baseline CNN model was augmented with Convolutional Block Attention Module (CBAM) and Squeeze-and-Excitation (SE) networks, which prioritize critical image regions and recalibrate feature channels. Comparative evaluations were conducted using ResNet50 combined with CBAM. Results: The CBAM-enhanced CNN achieved 98.6% accuracy, improving upon the baseline CNN’s 92.08%, with



a sensitivity of 98.3% and specificity of 97.9%. The SE-integrated CNN followed with 96.25% accuracy, demonstrating superior feature recalibration. ResNet50 with CBAM attained 93.32% accuracy. Compared to standard CNN models, these models exhibited reduced overfitting, improved generalization, and enhanced feature extraction. The proposed approach ensures a higher precision rate in detecting pneumonia from X-ray images. The model is designed for real-world clinical applications, particularly in low-resource healthcare settings. A lightweight, user-friendly web application was developed to assist radiologists and general practitioners in automated pneumonia detection, reducing reliance on expert interpretation.

Keywords: X-ray image classification, Pneumonia detection, Convolutional neural networks, CBAM

Title: Deep Google Net Model with SGDM Optimizer for Handwritten Sanskrit Character Recognition

Mrs. Shraddha V. Shelke, Dr. D. M. Chandwadkar, Dr. S. P. Ugale, and Dr. Rupali V. Chothe (Published in the journal-The Chinese Institute of Engineers on 16th October 2025).

Abstract: Recognizing handwritten scripts is difficult because of diverse writing styles and their temporal variations. More number of vowels and consonants, as well as more complicated characters used in Sanskrit, makes a task more challenging. The research presented here proposes a CNN-based method for handwritten character recognition. Feature extraction and classification are performed using a 22-layer GoogLeNet model with SGDM optimization on a Devanagari dataset comprising 72,000 handwritten samples. In the first experiment, the model is trained by varying epochs with a learning rate of 0.001. The optimized value of 15 epochs is selected from classification results. In the second experiment, GoogleNet is trained for different learning rates for 15 epochs to get maximum classification accuracy. Results show a maximum of 99.68% accuracy is obtained for a 0.01 learning rate. Model outperformed with 99.03% correctly classified characters and a loss of 0.0007 on the SD dataset. The accuracy of the NHCD dataset is 95.26% with 0.0185 losses. According to experimental findings, the suggested model performs better than earlier

models with an increase in classification accuracy by 1.68%.

Title: Automatic Selection of Controller Mode for Self-balancing Robot

Shreya P. Bire, Dr. K. N. Nandurkar and Dr. P. J. Pawar (Published in part of the book series: Lecture Notes in Electrical Engineering (LNEE, volume 1438) on 27th October 2025).

Abstract: Commonly used industrial controllers are designed to operate on one of the control modes-Proportional (P) mode, Proportional Integral (PI) mode, Proportional derivative (PD) mode, and Proportional-Integral-Derivative (PID) mode. However, every control mode has its own merits and demerits. When the system parameters are altered, the performance of the selected controller may deteriorate rapidly. To overcome this issue, intelligent online tuning of controller settings is proposed by several researchers. Although this method may improve the controller performance to some extent, it may be far below than that of best fit control mode for that condition. Hence, this work provides a methodology to evaluate the performance of different control modes and switch it to the most appropriate control mode in a real time manner automatically. Effectiveness of the proposed approach is demonstrated through an example of self-balancing robot.

■ Training and Placements

| Sr. No. | Company Name | Department Name | Placed Students |
|---------|------------------------------------|---------------------------------|-----------------|
| 1. | ESDS | Computer Engg. | 08 |
| | | Information Technology | 07 |
| 2. | Infosys | Computer Engg. | 02 |
| 3. | Netwin | Information Technology | 01 |
| 4. | Fox Control Pvt. Ltd. | Electronics & Telecommunication | 01 |
| | | Electrical Engg. | 01 |
| 5. | Schneider Electric India Pvt. Ltd. | Electrical Engg. | 01 |
| 6. | Torrent Green Energy Pvt. Ltd. | Electrical Engg. | 02 |

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■ Training and Placements

| Sr. No. | Company Name | Department | Class | Date |
|---------|--|-------------------------|-----------|---------------------|
| 1 | Science city, Ahmedabad | Robotics and Automation | TY and SY | 08/10/25 & 09/10/25 |
| 2 | Star word commercial complex, Nashik | Civil | SY | 8/10/25 |
| 3 | Three leaves building Govind Nagar, Nashik | Civil | SY | 8/10/25 |
| 4 | Star word commercial complex, Nashik | Civil | TY | 8/10/25 |
| 5 | Bombay exhibition centre, NESCO, Mumbai | Civil | TY | 10/10/25 |
| 6 | Nilgiri Bagh Water Treatment Plant, Nashik | Civil | B. Tech | 15/10/25 |
| 7 | BAAP Company Paregaon, Sangamner | Information Technology | TY | 04/10/25 |
| 8 | Omkar Systems | Electrical Engg. | TY | 07/10/25 |
| 9 | Godavari Biorefinery, Kopergaon | Chemical | B. Tech | 07/10/25 |
| 10 | VSCL, Vadevarrey, Nashik | Chemical | B. Tech | 09/10/25 |
| 11 | Agrisearch Pvt. Ltd., Dindori, Nashik | Chemical | TY | 16/10/25 |

■ Other Activities:

- Dr. K. N. Nandurkar visited K. K. Wagh CBSE School, Saraswati Nagar for the inauguration of the “Swayam” program on the occasion of Diwali on 15th October 2025.
- Dr. K. N. Nandurkar attended the “Sakhi Savitri” meeting at K. K. Wagh CBSE School, DGP Nagar as the Chairman of the School Managing Committee on 17th October 2025.
- Dr. K. S. Holkar (COE) was invited as an expert for project evaluation in the Avishkar Competition of SPPU Pune at KVN Naik College, Nashik on 3rd October 2025.
- Dr. S. N. Jain, Head of Chemical Engineering, was invited as an expert for project evaluation in the Avishkar Competition of SPPU Pune at LVH College, Nashik on 3rd October 2025.

■ Expert Talk



Expert lecture by Prof. V. G. Pangarkar (Retired Professor, ICT Mumbai)

■ Industrial Visit



Industrial visit to Vadivarhe Speciality Chemicals Ltd., Vadivarhe on 09th Oct. 2025.

Prof. Dr. K. N. Nandurkar
Director

