D Y PATIL COLLEGE OF ENGINEERING, AKURDI, PUNE 44   DEPARTMENT OF ARTIFICIAL INTELLIGENCE AND DATA SCIENCE

NEWS LETTER – MARCH 2025

Faculty Achievements and Participation:

- Dr. Bhagyashree Tingare, Assistant Professor of AIDS, has published a paper titled "Responsible AI on National Cybersecurity Strategy with Enhancement of Cybersecurity in Education", "A Multifaceted Overview of AI in Different Fields: A Survey ", "Unveiling the Black Box:Enhancing Transparency in Deep Learning Through Explainable AI", "Secure Cloud based Process-Oriented Teaching- Quality Approach in Higher Education with General " on March 2025.

A Multifaceted Overview of AI in Different Fields: A Survey

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Abstract. In recent years, Artificial Intelligence (AI) has transcended its status as a technological novelty to become an indispensable and pervasive tool across a wide range of fields, revolutionizing the very fabric of industry, science, and society. This comprehensive survey paper seeks to provide a panoramic view of the multifaceted applications of AI tools in diverse domains. By exploring the landscape of AI deployment, this paper aims to unravel the current state of the art, significant achievements, and the promising frontiers that AI offers across a myriad of disciplines. Our survey examines the adaptation of AI across numerous sectors, including but not limited to healthcare, finance, education, autonomous systems, natural language processing, computer vision, and more. Each section investigates the specific challenges that have been addressed through AI applications in these fields, offering insights into how AI techniques, algorithms, and technologies are utilized to optimize processes, enhance decision-making, and drive innovation. Moreover, this paper delves into the profound societal and ethical implications of the wide-scale integration of AI in various domains. It

Responsible AI on National Cybersecurity Strategy with Enhancement of Cybersecurity in Education

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Secure Cloud based Process-Oriented Teaching- Quality Approach in Higher Education with General AI

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Unveiling the Black Box: Enhancing Transparency in Deep Learning Through Explainable AI

Bhagyashree Ashok Tingare[a], Prasad Milind Upasani[b], Aditya Baswaraj Chidre[c], Aniket Manvendra Kachole[d]

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Abstract. This research paper delves into the significance of transparency in machine learning. Examines three techniques; Feature Visualization, Layer wise Relevance Propagation and Local Interpretable Model Agnostic Explanations. assigns relevance to features and neurons helping us understand the model better while Local Interpretable Model Agnostic Explanations provides agnostic explanations that are faithful to specific predictions making them easier to interpret. These methods have applications in healthcare, finance and natural language

Faculty Achievements and Participation Certificates

Name of Faculty Coordinator :   Mrs. Trupti G. Lonkar

Dr Vinayak Kottawar
Head of Department

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Faculty Achievements and Participation:

- Mrs. Shruti Sekra, Assistant Professor of AIDS, has published a paper - "LEVERAGING AI AND MOBILE HEALTH (MHEALTH) FOR MATERNAL WELL-BEING: THE MOTHER-WELL PROJECT" and "AI COMPANIONSHIP: CHATBOT ASSISTANCE FOR MENTAL HEALTH CARE" on March 2025.

- Mrs. Manasi Karajgar, Assistant Professor of AIDS, has participated in Participated in paper presentation title "Enhancing Flower Species Classification Using Transfer Learning and Efficient Net: A Comprehensive Study", on 5th march and 6th march 2025.

- Dr. Bhagyashree Tingare, Assistant Professor of AIDS, has published a paper titled "SaaS Revaluation: The future of business applications", on March 2025.

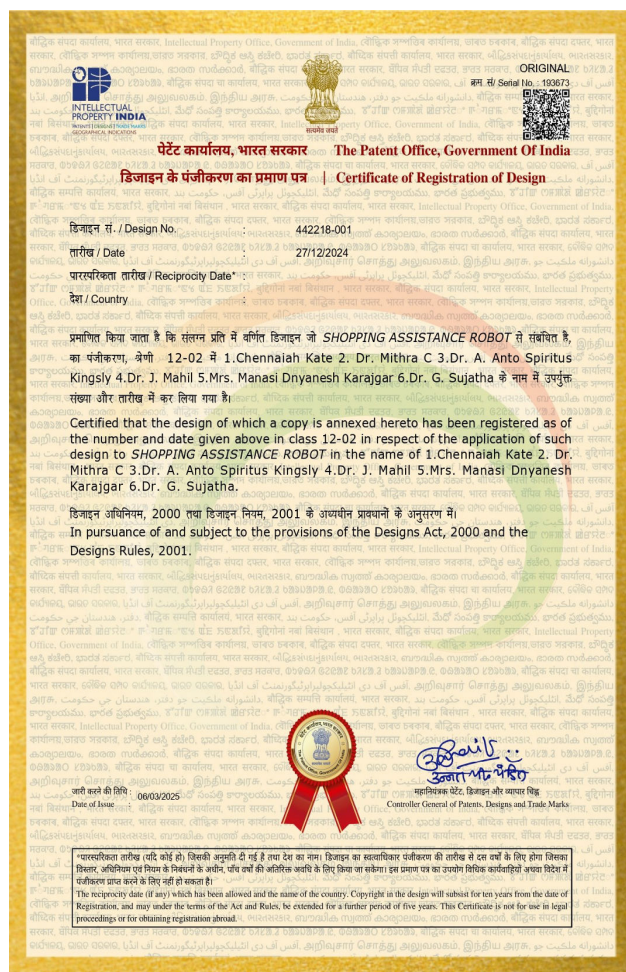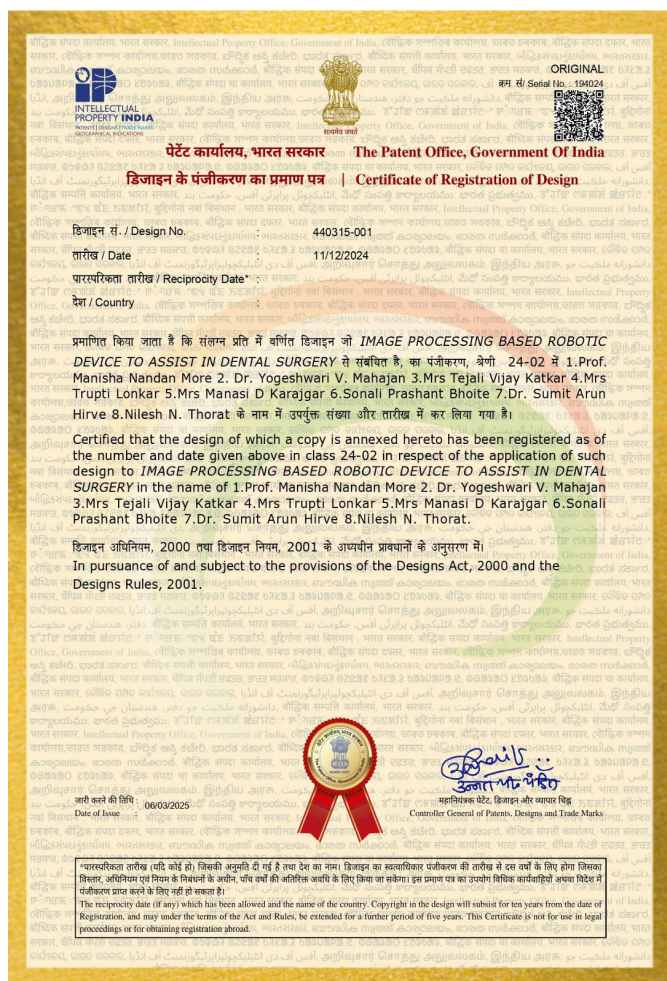Faculty Achievements and Participation Certificates

Name of	Mrs. Trupti G. Lonkar

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Head of Department

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Faculty Achievements and Participation:

- Mrs. Manasi Karajgar, Mrs. Tejali Katkar and Mrs. Trupti Lonkar, Assistant Professor of AIDS, granted their patent " image processing based robotic device to help dental surgery " on 6th March 2025

- Mrs. Manasi Karajgar, Assistant Professor of AIDS, granted their patent "Design patent grant on A novel AI based shopping assistance robot" on 6th March 2025

Faculty Achievements and Participation Certificates

Name of Faculty	Mrs. Trupti G. Lonkar

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Faculty Achievements and Participation:

- Mrs. Vidya Bhosale, Mrs. Snehal Malpani and Mrs. Shruti Sekra, Assistant Professor of AIDS, attended 7– days workshop "Research Methodology and Publication Ethics" from 5th March to 11th-March 2025.

Faculty Achievements and Participation Certificates

Name of Faculty	Mrs. Trupti G. Lonkar

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Head of Department

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Students Achievements and Participation:

- Mr. Yash Shangondawar from SE A div, has Got runner up position in the national level hackathon which was held in nashik kk wagh college on 2nd March 2025.

- Mr. Prathamesh Edlawarf rom SE B div, has participated in the Qualifier Round of InnoVerse- 2k25, a State-Level Hackathon" in March 2025.

- Mr. Ruturaj Mahekar and Paras Yadav from TE A div, has participated in 24-hour hackathon named HackMatrix " on 7th and 8th March 2025.

Student Achievements Certificates

Name of Faculty Coordinator : Mrs. Trupti G. Lonkar

Dr Vinayak Kottawar
Head of Department

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Students Achievements and Participation:

- Ms. Sampada Sanjay Waghode from SE B div, has Successfully completed EduSkills TECH CAMP on Zscaler Zero Trust Cloud Security, from 3rd March to 5th March 2025.

- Mr. Anubhav Sharma from TE A div, has successfully completed a 12-week course on "Complete Django Web Development Course - Basics to Advance " in March 2025.

- Mr. Kushang Nilesh Chaudhari from TE B div, has Successfully completed course "Became a data Scientist " on 24th March 2025.

- Mr. Aryan Palve from TE A div, has Participate in AI Challenge and secured 1st position IndovateAI sprint 2025" on 1st and 2nd March 2025.

Student Achievements Certificates

Name of Faculty Coordinator :   Mrs. Trupti G. Lonkar

Dr Vinayak Kottawar
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Students Achievements and Participation:

- Mr. Rohit Ramesh Shinde SE B div, has successfully completed course "Data Visualisation: Empowering Business With Effective Insights" on 1st March February 2025.

- Mr. Aaryan Palve, Mr. Yash Mhaskar, Mr. Parth Magar, and Mr. Uday Bhole from TE A, has got 1st place in the Indovate AI Sprint, an AI model hackathon in the FinTech domain " held on 1st and 2nd March 2025.

- Mr. Yash Shangondawar , from SE A, has Runner-Up in the INNOV-ERA National Level Hackathon " held on 2nd March 2025.

Student Participation Achievements certificate Glimpse

Name of Faculty Coordinator : Mrs. Trupti G. Lonkar

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Head of Department

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Department activities:

- The Department of Artificial Intelligence and Data Science Engineering, Organized Industrial visit to Mapro food products ltd, Wai, Mahabaleshwar on 21st March 2023. The Visit was coordinated by .Dr. Bhagyashree Tengare, Mr. Bhushan Jaware, Mrs. Rasika Wattamwar, Ms. Rajshri Ingale. Around 172 (SE, TE) students and 11 staff member visited to Mahabaleshwar.

- The Department of Artificial Intelligence and Data Science Engineering, Organized IKS visit to Mahabaleshwar Temple on 21st March 2023. The Visit was coordinated by Dr. Bhagyashree Tengare, Mr. Bhushan Jaware, Mrs. Rasika Wattamwar, Ms. Rajshri Ingale. Around 172 (SE, TE) students and 11 staff member visited to Mahabaleshwar.

Some Glimpses of the Industrial and IKS Visit

| **Name of Faculty Coordinator :** | Mrs. Trupti G. Lonkar |

Dr Vinayak Kottawar
Head of Department

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Department activities:

- <u>The Department of Artificial Intelligence and Data Science Engineering organized a workshop on "AI for the Youth: Machines and Minds" at Shri Dnyaneshwar Vidyalaya, Alandi, Khed, Pune, for 8th and 9th-grade students under the</u> S4DS club on March 27th and 28th, 2023. The workshop was coordinated by Mrs. Manasi Karajgar.

Some Glimpses of the Event

Name of Faculty Coordinator : Mrs. Trupti G. Lonkar

Dr Vinayak Kottawar
Head of Department