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PES INSTITUTE OF TECHNOLOGY AND MANAGEMENT

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NBA Accredited Programs: CSE, ECE, ISE, CV, ME and EEE



DEPT of AIML

AIM

Prakshya

Department Official Newsletter



One step towards success

DECEMBER 2024



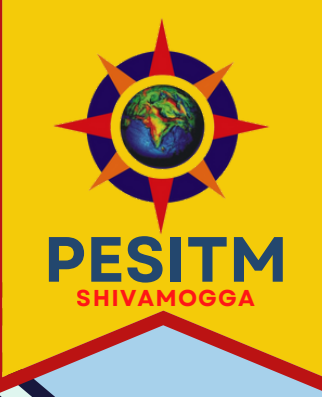
About AIML & its Scope

The industrial revolution 4.0 has introduced several new technologies that engineers need to imbibe to be relevant for the future. One among them is Artificial Intelligence and Machine Learning which is going to be a new trend that is going to shape the future and such engineers would be called as future thinking engineers. But given the new industrial revolution it has become essential that consolidation and strengthening of existing programs take place along with re-looking the engineering programs by introducing advance courses which is relevant with the new age demands. These kind of program should have specializations and there is need of futuristic courses that can keep pace with the technological and industrial advancements.

Artificial intelligence (AI) is wide-ranging branch of computer science concerned with building smart machines capable of performing tasks that typically require human intelligence. The field of artificial intelligence has been an interdisciplinary endeavor, requiring deep knowledge of both computational and human sciences.

Machine learning is an application of artificial intelligence (AI) that provides systems the ability to automatically learn and improve from experience without being explicitly programmed. Machine learning focuses on the development of computer programs that can access data and use it learn for themselves.

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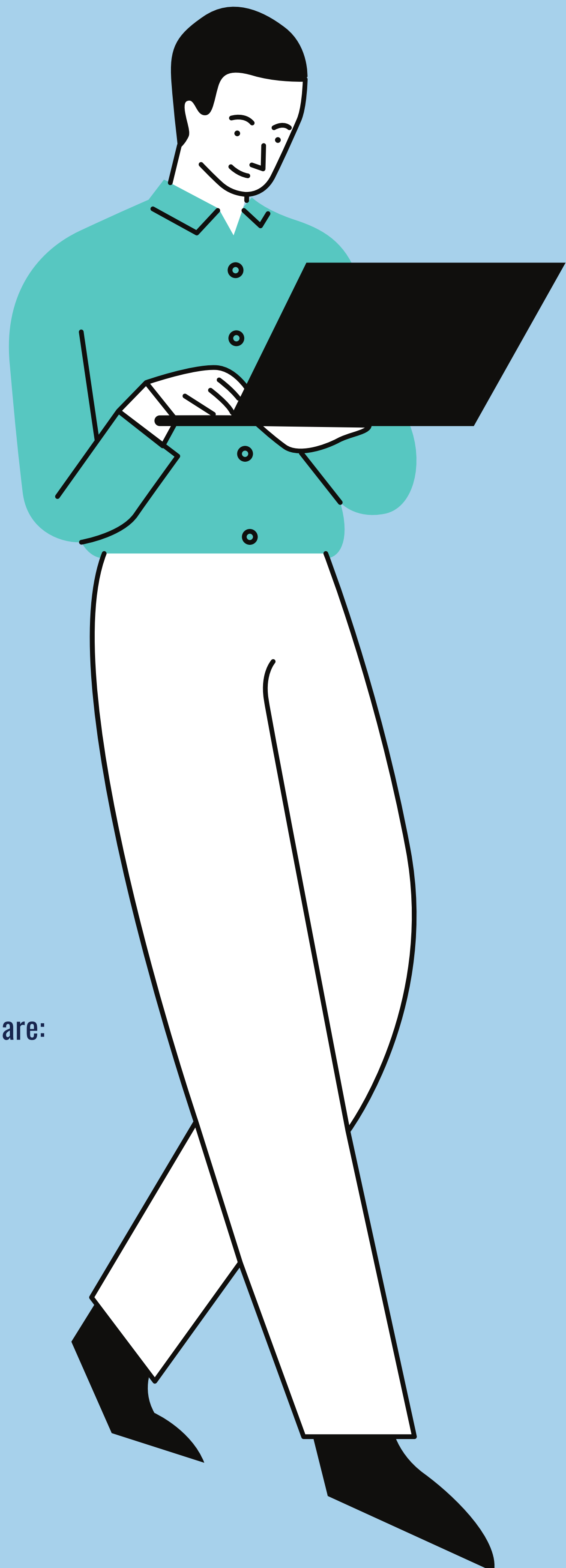
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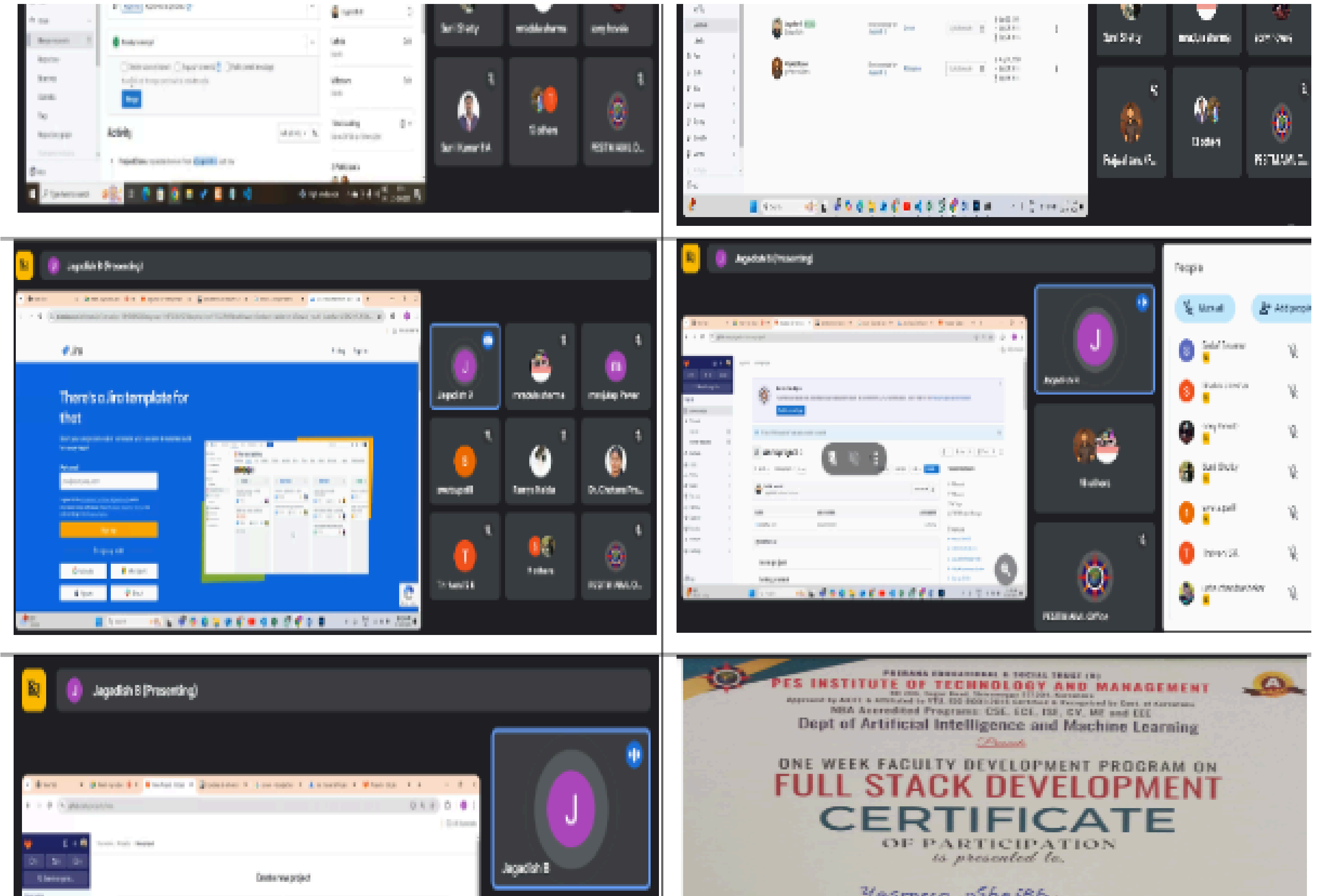
09 Academic & Industrial Visit to IIT Dharwad and Haegl Technologies, Hubballi
11-12-2024

10 ATAL FDP on Integrative AI Technologies in Healthcare: Navigating the Future with Image Processing & IoT
16-21/12-2024



FDP on Full Stack Development - Online Mode

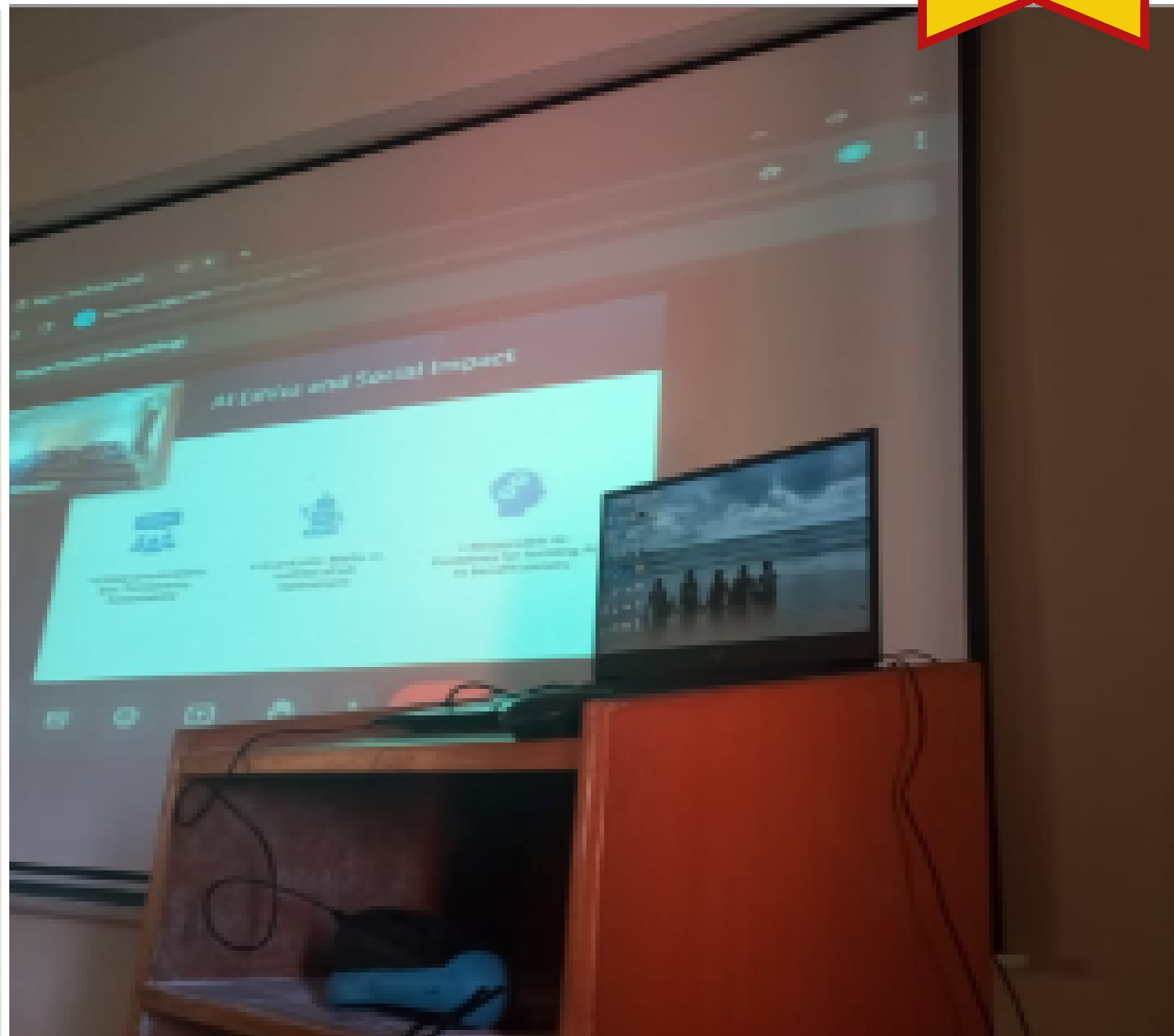
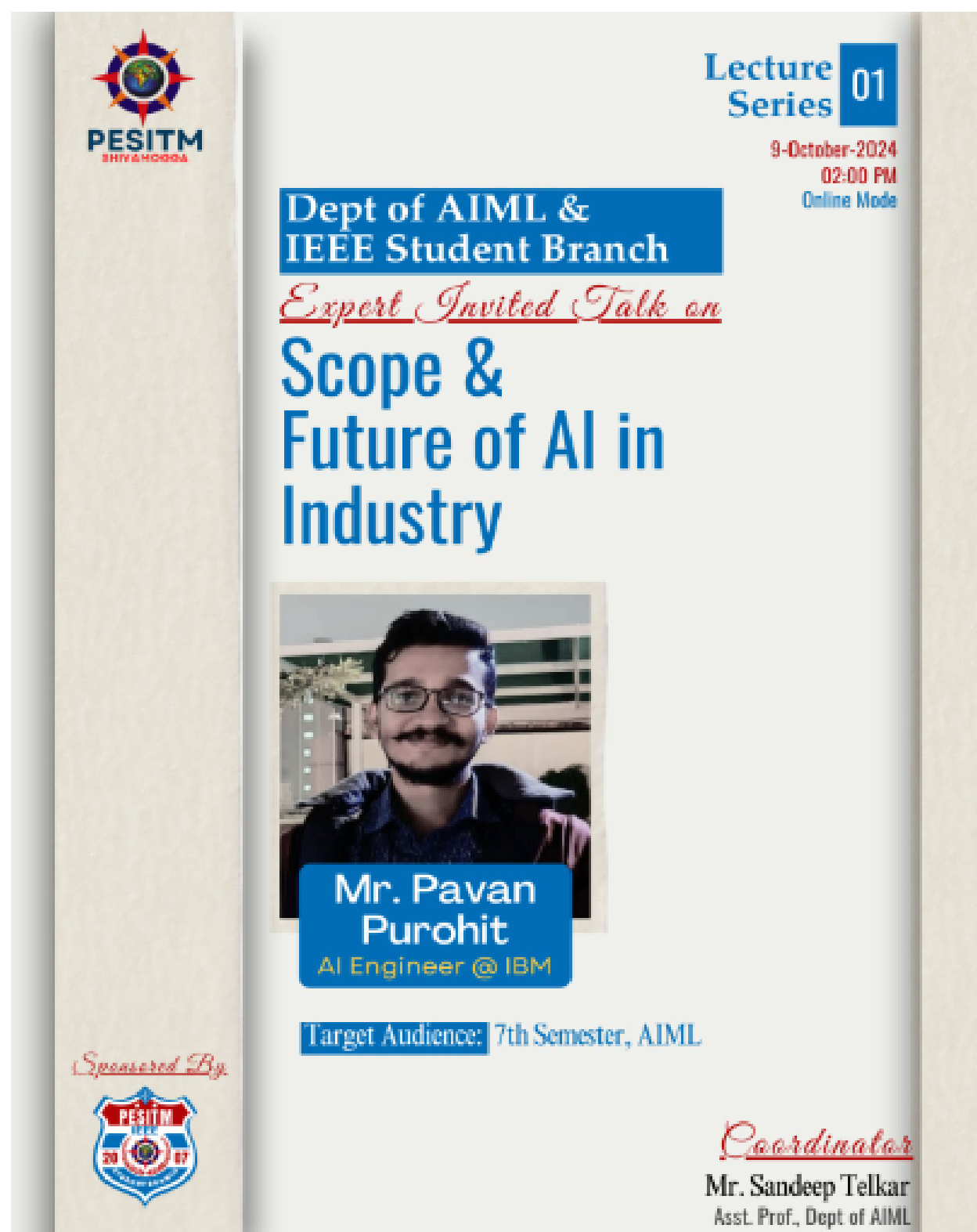
17-09-2024 to 21-09-2024



The Department of AI & ML at PESITM Shivamogga organized a Faculty Development Programme (FDP) on Full Stack Development from 17th to 21st September 2024. The FDP was designed to enhance the technical, pedagogical, and project management skills of faculty members, enabling them to effectively teach full-stack development to students. The programme provided comprehensive exposure to frontend and backend technologies, including HTML, CSS, JavaScript, React, Node.js, databases (SQL/MongoDB), and version control systems like Git.

The FDP also focused on bridging the gap between academia and industry by introducing real-world project workflows, agile methodologies, CI/CD practices, and the software development lifecycle (SDLC). Faculty members received hands-on training in mobile and web app development, including React Native and Android tools, ensuring they can guide students in building cross-platform applications. Additionally, the programme emphasized project management skills and best practices in software development, equipping faculty to mentor students through the complete lifecycle of full-stack projects. Overall, the FDP provided a valuable platform for skill enhancement and knowledge sharing, aligning teaching practices with current industry standards.

Scope and Future of AI in Industry. 09-10-2024



The Department of Artificial Intelligence & Machine Learning, PESITM Shivamogga, in association with the IEEE Student Branch, organized the first session of the Lecture Series on October 9, 2024. The expert talk on “Scope and Future of AI in Industry” was delivered by Mr. Pavan Purohit, an AI Engineer at IBM Bangalore. The session provided students with valuable insights into how Artificial Intelligence is reshaping industries and creating vast opportunities for aspiring professionals.

In his talk, Mr. Purohit emphasized that AI is no longer confined to technology giants but has found applications across diverse sectors such as finance, healthcare, retail, logistics, and manufacturing. He explained how data serves as the foundation for AI innovation and highlighted the pivotal role AI engineers play in deploying models, ensuring data integrity, and optimizing machine learning processes. Real-world examples illustrated the transformative impact of AI in healthcare through advanced diagnostics and personalized treatments, in finance through fraud detection and risk assessment, and in retail and manufacturing through predictive maintenance, automation, and enhanced customer experience.

The session also served as a career guidance platform for AIML students. Mr. Purohit advised students to strengthen their technical expertise in machine learning algorithms, neural networks, and Python programming while also building domain-specific skills in areas like natural language processing, computer vision, and robotics. He stressed the importance of gaining practical exposure through projects, internships, and competitions, while also developing essential soft skills such as communication and teamwork to thrive in collaborative industry settings.

Introducing Full Stack to 3rd Semester Students

05-10-2024

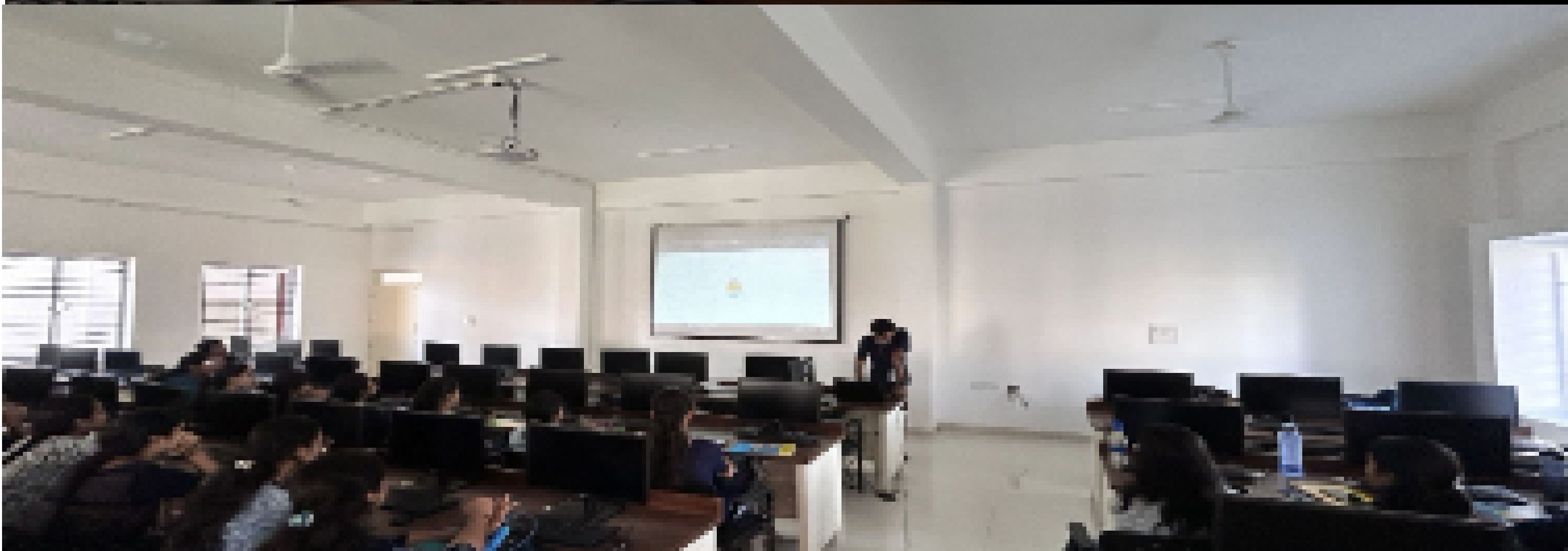
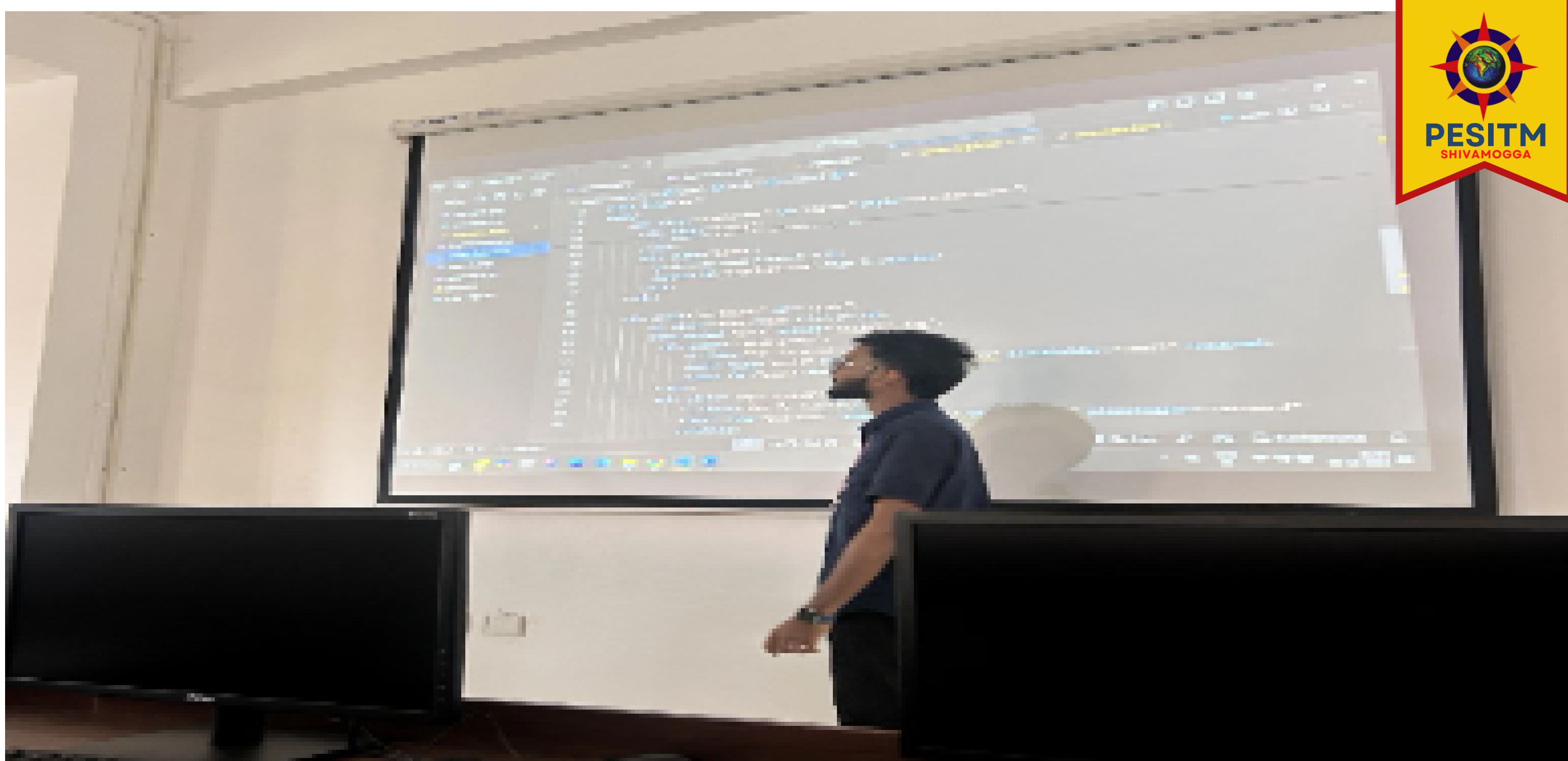


The poster is for a lecture series session. It features the PESITM Shivamogga logo at the top left. The text 'Lecture Series 02' is in the top right. Below that, it says '9-October-2024 03:00 PM Online Mode'. The main title is 'Dept of AIML & IEEE Student Branch' followed by 'In-house workshop on Introducing Full Stack to 3rd semester'. A photo of Sufiyan Ahmed S A is shown with his name and ID '4PM22AIO49' below it. The target audience is '3rd Semester, AIML'. At the bottom, it says 'Sponsored By' with a PESITM logo and 'Coordinator Mr. Sandeep Telkar Asst. Prof., Dept of AIML'.

On October 9, 2024, the Department of AI&ML, PESITM Shivamogga, in association with the IEEE Student Branch, conducted the second session of its Lecture Series. The session was delivered by Mr. Sufiyan Ahmed, a 5th-semester student from the AIML department, who introduced the concepts of Full Stack Development to 3rd-semester AIML students.

Mr. Ahmed began by explaining full stack development as the process of building both the front-end (client side) and back-end (server side) of a web application. He highlighted its relevance to AIML students, noting that many AI and ML applications are deployed in web-based environments, making it essential for students to understand how to design interfaces, manage servers, and connect with databases.

The session covered the major components of full stack development. On the front-end, students were introduced to HTML, CSS, and JavaScript, along with frameworks such as React and Vue.js for creating dynamic interfaces. On the back-end, Mr. Ahmed discussed Node.js and Express, emphasizing their role in data handling and server-side logic. He also introduced databases like MySQL and MongoDB, explaining how they are used to store and manage data, particularly in applications that integrate machine learning models.



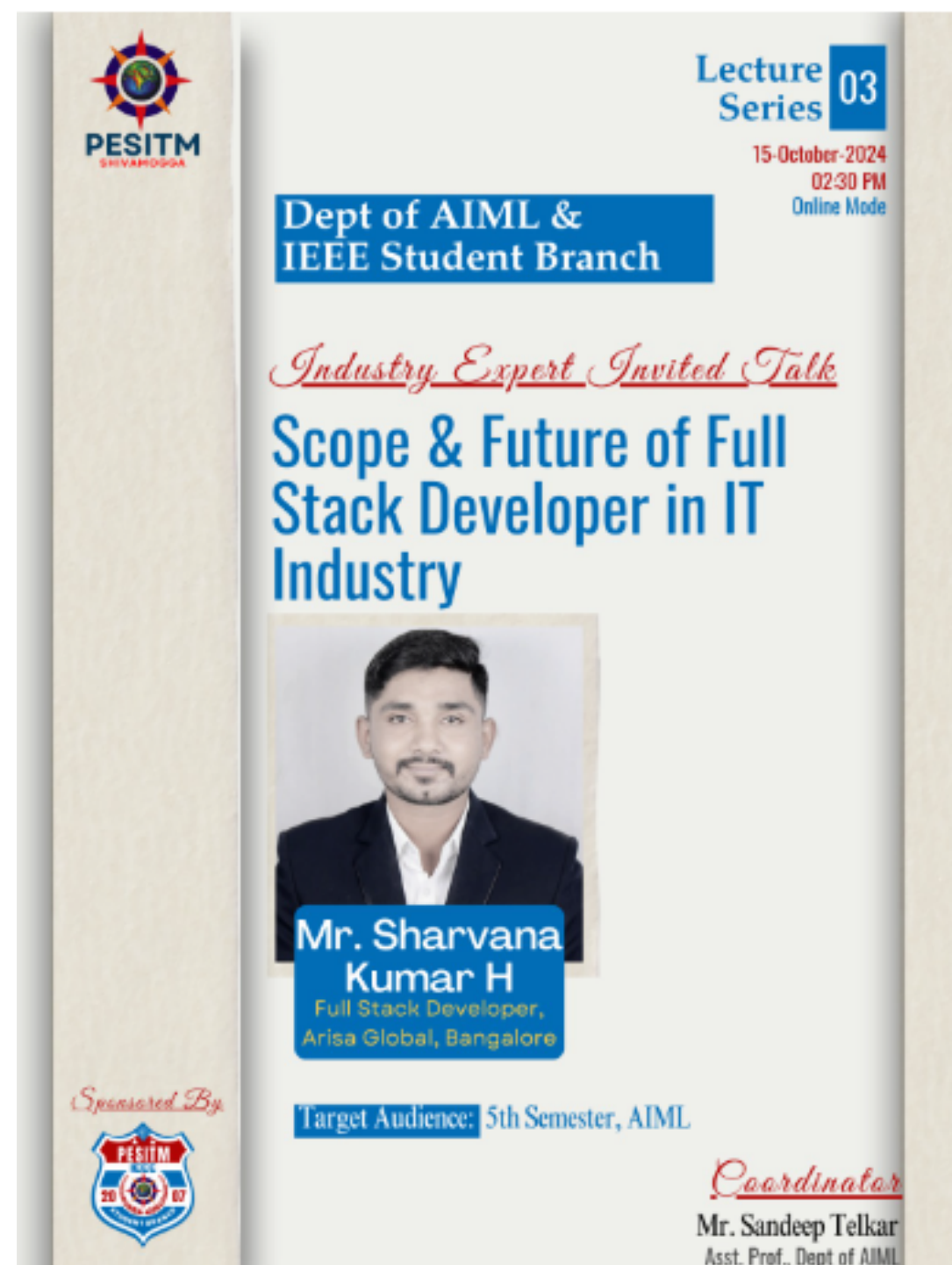
Students also gained an overview of essential tools and technologies. Mr. Ahmed demonstrated the use of Git and GitHub for version control and collaborative coding, explained the role of APIs in enabling communication between front-end and back-end systems, and introduced platforms such as Heroku and Netlify for deploying applications online.

To guide beginners, he recommended a structured learning path starting with HTML/CSS, moving to JavaScript, and gradually progressing to back-end frameworks. He also shared valuable online resources like freeCodeCamp, MDN Web Docs, and Codecademy, while encouraging students to practice by building small projects such as calculators, note-taking apps, or simple games.

The session proved to be highly beneficial for 3rd-semester AIML students, offering them both foundational knowledge and practical guidance in full stack development. Mr. Sufiyan Ahmed effectively demonstrated how these skills complement AI and ML expertise, enabling students to create real-world, deployable applications. His insights and recommendations provided an excellent starting point for those interested in expanding their technical capabilities beyond core AI concepts.

Scope & Future of Full Stack Developer in IT Industry.

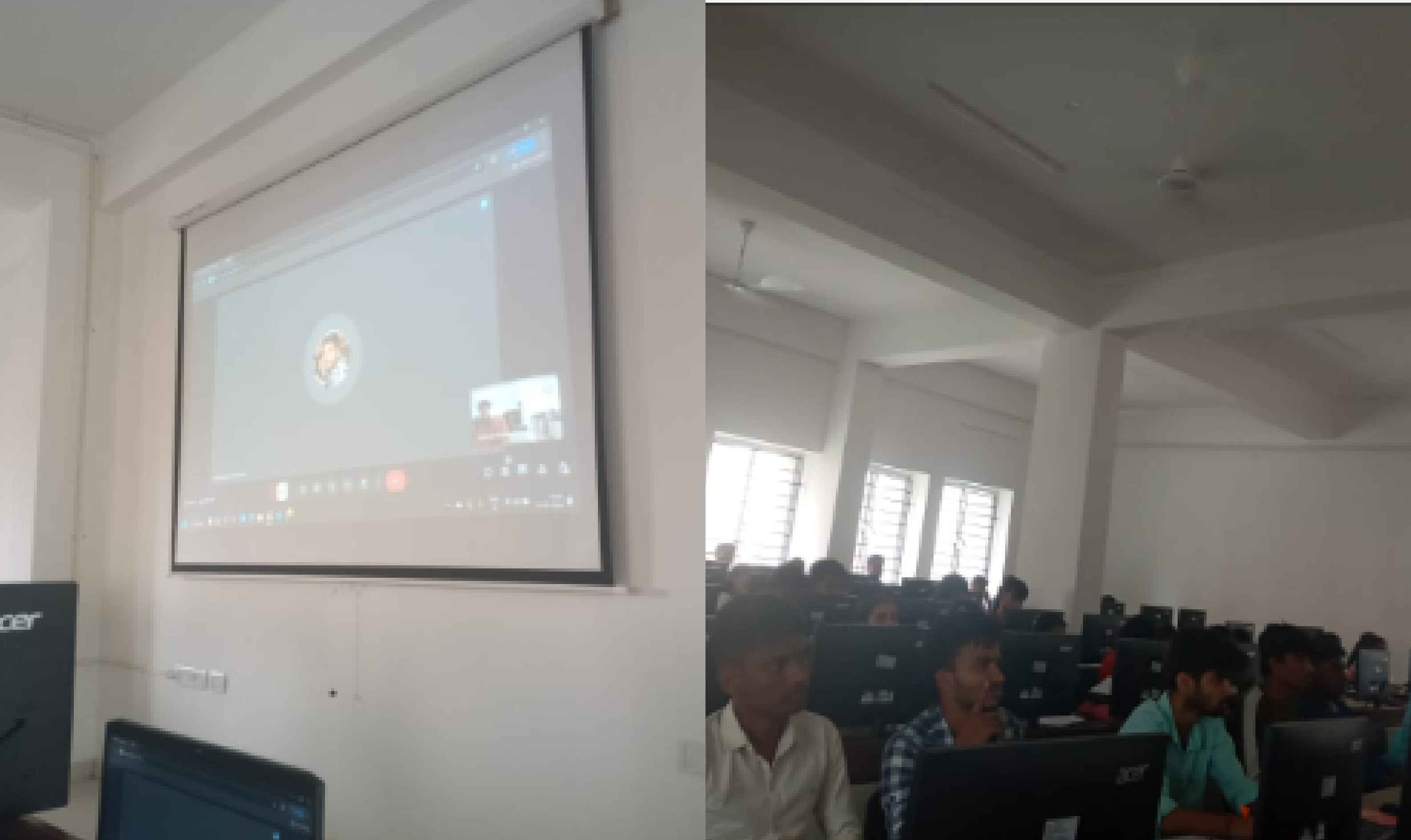
15-10-2024



The Department of AI&ML, PESITM Shivamogga, in association with the IEEE Student Branch, conducted the third session of its Lecture Series on October 15, 2024. The talk on “Scope & Future of Full Stack Developer in IT Industry” was delivered by Mr. Shravan, an experienced Full Stack Developer at Arisa Global, Bangalore. The session was tailored for 5th-semester AIML students, focusing on the skills, opportunities, and future trends shaping the role of full stack developers in today’s technology-driven world.

Mr. Shravan began by defining the role of a full stack developer, emphasizing their proficiency in both front-end and back-end development. He highlighted essential technologies such as HTML, CSS, JavaScript for front-end development, and Node.js, Python, and Ruby for back-end systems, alongside databases like MySQL and MongoDB. His talk underlined how full stack developers manage end-to-end application development, from user interfaces to server logic and database connectivity.

The session explored the growing industry demand for full stack developers, driven by their versatility and ability to adapt to different stages of development. Companies, especially start-ups and agile organizations, value their skills for cost efficiency, flexibility, and project adaptability. With high employment potential, the role of a full stack developer has become one of the most sought-after in the IT industry.



Mr. Shravan also detailed the skills required for success in this field. Alongside technical expertise in frameworks like React, Angular, and Node.js, he stressed the importance of database management, version control with Git, and essential soft skills such as communication, problem-solving, and teamwork. Looking ahead, he shared insights on future trends, including the integration of cloud-based platforms like AWS and Google Cloud, and the rise of low-code/no-code platforms that are reshaping the way applications are developed and deployed. For AIML students, he provided practical guidance on starting their full stack journey. He recommended beginning with core web technologies (HTML, CSS, JavaScript) before advancing to frameworks and back-end programming. He encouraged students to build projects such as e-commerce platforms and data-driven applications, participate in hackathons, and contribute to open-source communities to strengthen their skills and portfolios. Concluding the session, Mr. Shravan highlighted the promising future of full stack development, noting its flexibility, wide-ranging applications, and strong career prospects in IT. His insights gave students a comprehensive understanding of the field and clear direction on how to prepare themselves for careers as full stack developers.

Parent Teachers Meeting

09-11-2024



The Department of AI & ML at PESITM Shivamogga organized its Parents–Teachers Meeting on 9th November 2024, coordinated by Mrs. Shilpa KC and Dr. Likewin Thomas, HOD of the department. The meeting began with a warm welcome, highlighting the department’s vision to nurture ethically grounded AI professionals and emphasizing the essential role of parental support in students’ academic success. The HOD provided an overview of the curriculum, focusing on core courses such as Data Structures, Machine Learning, and Neural Networks, along with project-based assessments, skill evaluations, and interactive lab sessions that ensure students’ technical growth aligns with industry requirements.

Dr. Likewin Thomas shared highlights of events conducted by the department, including the Full Stack Development Workshop for 3rd-semester students, a lecture series featuring industry experts, the IEEE Conference for presenting student and faculty research, Innofest for hackathons and technical challenges, and Ruchisambrama, a cultural and culinary event fostering community and team spirit. Looking ahead, the department plans workshops on Python, AIML, IoT, and Generative AI, along with an industrial visit for 3rd-semester students to gain practical exposure to AI and ML applications in industry.

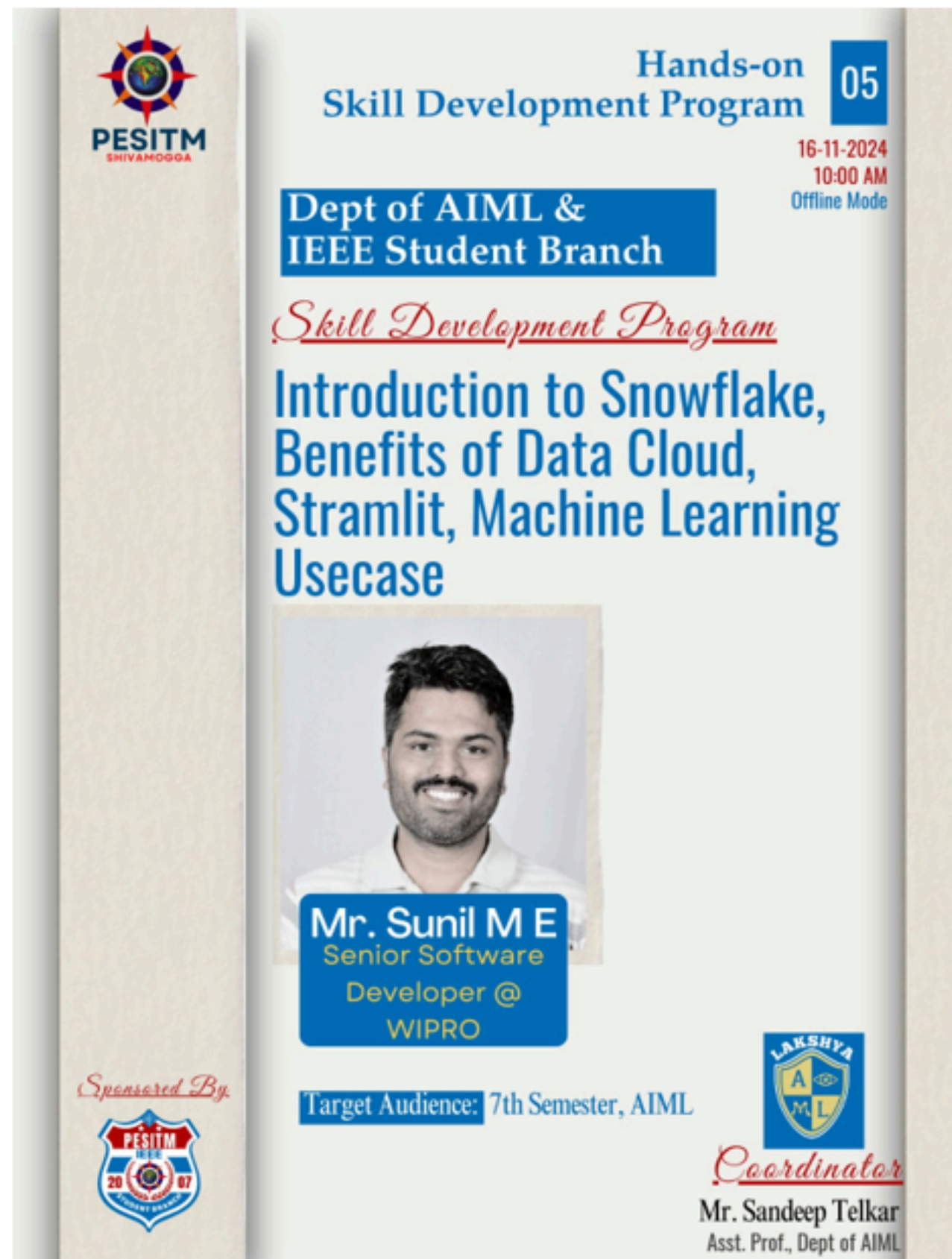


The roadmap for student success was outlined, emphasizing skill-building workshops, industry engagement, project-based learning, continuous feedback, career readiness, and holistic growth. Parents were encouraged to actively support their children's participation in workshops, events, and extracurricular activities, discuss career goals, and maintain open communication with the department regarding academic progress. Faculty members shared detailed feedback on students' performance, attendance, and participation, while a dedicated feedback and Q&A session allowed parents to provide suggestions and clarify concerns about workshop schedules, internships, and placement opportunities. The meeting concluded positively, reinforcing a strong collaboration between parents and faculty to ensure students' academic excellence and professional readiness in the evolving field of AI and ML.

Skill Development Programme Snowflake, Data Cloud, Streamlit & ML Use Cases



16-12-2024



The Department of AI & ML at PESITM Shivamogga conducted Skill Development Programme on 16th November 2024, coordinated by Mr. Sandeep Telkar R, for 7th-semester students. The session, led by Mr. Sunil M.E., focused on Snowflake, benefits of data cloud, Streamlit, and machine learning use cases. Students explored Snowflake's cloud-based architecture, including scalability, concurrency, real-time analytics, and seamless data integration. The advantages of data clouds were highlighted, such as centralized and collaborative data management, operational efficiency, enhanced security, and improved decision-making, with real-world examples of organizational innovation.

The programme also introduced Streamlit, a Python-based tool for building interactive ML web applications, along with a practical demonstration of deploying machine learning models. Participants learned about real-world ML applications in healthcare, finance, e-commerce, and fraud detection, emphasizing how students can apply ML techniques to solve industry-relevant challenges. The session concluded with an interactive Q&A, providing students an opportunity to clarify doubts and receive career guidance. Overall, the programme offered hands-on experience, practical insights, and exposure to emerging industry trends, equipping future AIML professionals with essential skills.

Ethnic Day & Ruchi Sambrama



Ethnic Day was celebrated with great enthusiasm, and our department proudly showcased the vibrant culture of Maharashtra as our theme. Right from the entrance, the setup transported everyone to the land of Marathas – with majestic fort walls built by students and a striking idol of Chhatrapati Shivaji Maharaj standing tall as the protector of the gateway.

Inside the department, the decorations carried a perfect mix of history and modernity. At the center stood a beautifully crafted replica of a fort, symbolizing the pride of Maharashtra. A serene Shiva temple was placed in the middle, adding a divine aura, while a waterfall on one side brought a touch of natural beauty. To highlight the progress of the state, the opposite wall featured iconic landmarks like the Taj Hotel and the Bombay Stock Exchange (BSE) building, showing how the state blends rich heritage with modern growth.

Students truly brought the theme alive by dressing up in traditional Maharashtrian attire – sarees, dhotis, and colorful turbans – which filled the day with authenticity and color. The spirit of Maharashtra didn't just stop at decoration; our department also represented the state in the college quadrangle through a skit performance, depicting the cultural essence, bravery, and traditions of Maharashtra. The performance was widely appreciated, making it a proud moment for the department.



Ruchi Sambrama 2.0, proudly hosted by the Department of AIML, was organized in the college parking lot, which was beautifully transformed into a lively hub of food, colors, and celebration. The entire area buzzed with excitement as students from all branches came together to set up a wide variety of food stalls. To make the fest even grander, a few stalls were also invited from outside, adding professional flavors alongside the creativity of students.

Each stall reflected the spirit of teamwork and innovation — from mouthwatering traditional delicacies to modern fusion recipes, every corner offered something unique. Students not only cooked but also competed in decorating their stalls with vibrant themes, catchy names, and creative presentations, which drew large crowds of faculty, friends, and visitors. The parking lot filled with the aroma of spices, the sound of chatter and laughter, and the cheerful energy of people moving from one stall to another.

The event went beyond being just a food fest — it became a platform for students to showcase entrepreneurship, collaboration, and creativity. It also brought together the entire college community, as people bonded over food, shared conversations, and enjoyed the festive mood. By the end of the day, Ruchi Sambrama 2.0 stood out as a flavorful success — a celebration that combined food, culture, and unity, leaving behind memories of joy, togetherness, and the unbeatable charm of good food shared with great company.

ASPIRE Leadership Program Awareness Session

Mr. Srinivasa Somayaji
3rd Year AIML Student

03-12-2024



The poster is for a lecture series event. It features the PESITM Shivamogga logo at the top left. The text 'Dept of AIML & IEEE Student Branch' is in a blue box. The title 'Leadership Talk on What is ASPIRE LEADERSHIP PROGRAM & BENEFITS. How to Apply for it!' is in a mix of blue and red fonts. A photo of Srinivasa Somayaji, a 2nd Year AIML Student, is shown. The target audience is 'Students across the semester'. The event is coordinated by Mr. Sandeep Telkar, Asst. Prof., Dept of AIML. The date and time are 03-12-2024, 7.30pm to 8.30pm, Online Mode. The lecture series number is 06.

PESITM
SHIVAMOGGA

Lecture Series 06
03-12-2024
7.30pm to 8.30pm
Online Mode

Dept of AIML & IEEE Student Branch

Leadership Talk on
What is ASPIRE LEADERSHIP PROGRAM & BENEFITS.
How to Apply for it!


Srinivasa Somayaji
2nd Year AIML Student

Sponsored By


Target Audience: Students across the semester


Coordinator
Mr. Sandeep Telkar
Asst. Prof., Dept of AIML

About the Event:

The Department of AI & Machine Learning, in partnership with the IEEE Student Branch, organized the 6th edition of their Lecture Series on December 3rd, 2024, focusing on leadership development through the ASPIRE Leadership Program. This online session was strategically scheduled from 7:30-8:30 PM to accommodate students' academic schedules while providing valuable insights into leadership opportunities. The event featured Srinivasa Somayaji, a 2nd year AIML student, who served as the resource person, demonstrating the department's commitment to peer-to-peer learning and student mentorship. The session covered comprehensive details about the ASPIRE Leadership Program, including its structure, benefits for personal and professional development, eligibility criteria, and step-by-step application procedures. Students from across all semesters were encouraged to participate, making it an inclusive platform for leadership awareness. The program was coordinated by Mr. Sandeep Telkar, Assistant Professor from the AIML Department, ensuring academic guidance and support throughout the session.

Conclusion:

The ASPIRE Leadership Program awareness session successfully achieved its objective of inspiring students to explore leadership development opportunities beyond their regular curriculum. By featuring a student speaker, the event created a relatable and encouraging environment where participants could easily connect with the shared experiences and insights. The initiative reflects the department's holistic approach to student development, emphasizing not just technical skills but also leadership qualities essential for future career success. This session empowered students with the knowledge and confidence to apply for prestigious leadership programs, potentially opening new avenues for their personal growth and professional advancement in the competitive technology landscape.

Academic & Industrial Visit to IIT Dharwad and Haegl Technologies, Hubballi

11-12-2024



The Department of Artificial Intelligence & Machine Learning at PESITM organized an Academic & Industrial Visit on 11th December 2024 for 58 students from the 3rd and 7th semesters, accompanied by faculty members Prof. Sandeep Telkar R, Mrs. Poornima BP, Ms. Shilpa MI, and Mrs. Mamatha. The visit began early at 6:30 am from PESITM, reaching IIT Dharwad by 11:30 am, where students were welcomed by Mr. Nagraj Naikar, Public Relations Officer. The students attended a technical talk by Dr. Achyut Mani, Assistant Professor, CSE Dept, on Artificial Intelligence & Machine Learning, followed by visits to the Central Instrumentation Facility, Central Instructional Lab, and Central Learning Theatre, gaining exposure to advanced research labs and academic facilities. IIT Dharwad, established in 2016, is renowned for promoting research, innovation, and industry-academia collaborations in engineering and technology fields.

The visit continued at Haegl Technologies, Hubballi, where students attended a technical talk by Mr. Goutam Shigoankar, Founder & CEO, on “How to Become an Entrepreneur”. Haegl Technologies, established in 2019, specializes in AI and robotics solutions for healthcare, agriculture, and education sectors. The company has been recognized nationally and received multiple funding and incubation support, including recognition among the top 100 startups in Karnataka under the Elevate Scheme. The visit offered students valuable insights into real-world applications of AI & ML, entrepreneurial journeys, and cutting-edge technological innovations, enriching their academic experience and inspiring future professional aspirations.



ATAL FDP on Integrative AI Technologies in Healthcare: Navigating the Future with Image Processing & IoT



16-12-2024 to 21-12-2024



The Department of Artificial Intelligence & Machine Learning (AIML), PES Institute of Technology & Management, Shivamogga, in collaboration with the AICTE Training and Learning (ATAL) Academy, Pune, successfully organized a Six-Day Faculty Development Program (FDP) from December 16–21, 2024.

This program brought together renowned academicians, industry experts, and faculty participants from across India to explore how Artificial Intelligence (AI), Machine Learning (ML), Medical Image Processing, and the Internet of Things (IoT) are transforming the future of healthcare.

Objectives of the FDP

- To equip faculty members with cutting-edge knowledge in AI and IoT applications for healthcare.
- To enhance diagnostic accuracy, patient care, and efficiency in medical systems through AI-driven approaches.
- To provide hands-on training with deep learning models, IoT sensors, and medical imaging technologies.
- To encourage academic-industry collaboration and interdisciplinary learning.



Highlights

- Topics: AI in Healthcare, Medical Image Processing (Python, OpenCV, Deep Learning), IoT-based Health Monitoring, AI Solutions for Healthcare.
- Hands-on Training: Implementing CNNs for disease detection and IoT-enabled wearable health devices.
- Expert Talks:
 - AI in Radiology – Dr. Prakashini K., KMC Manipal
 - IoT for Remote Monitoring – Dr. Sachin S. Bhat
 - Deep Learning in Medical Imaging – Dr. Jeny Rajan, NITK Surathkal
 - AI for Early Breast Cancer Detection – Dr. Siva Teja Kakileti, Nirmai
 - Medical Image Processing with Computer Vision – Prof. R. Venkatesh Babu, IISc Bangalore
- Industry Visit: Manipal Universal Technology Business Incubator (MUTBI).

Outcomes

Participants gained strong foundations in AI & IoT healthcare applications, hands-on exposure to deep learning & IoT systems, and opportunities for networking and collaboration.

The FDP, guided by Dr. Likewin Thomas (Dept. of AIML) with support from AICTE ATAL Academy, Pune, was widely appreciated for its quality sessions and practical learning.

On 11th and 12th of June, a group of students embarked on an adventurous trip exploring scenic and cultural landmarks. They visited the breathtaking Rani Ihari View Point, the serene Ambha Theertha, the Tea Estate and Ganesh Temple in Samse, and the stunning Elaneeru Falls. The journey concluded with a peaceful visit to Sringeri Temple, blending nature, adventure, and culture. It was a memorable two-day experience filled with bonding, laughter, and unforgettable memories.

11-12, JUNE
2025

A beautiful Journey

