Report on Alumni Lecture Series- 3 by Mr. Rajat Pashine

Introduction

On 2nd March 2024, the department organized an insightful 3rd lecture in the Alumni Lecture Series on the topic "Technical Opportunities in the Automotive Industry for Engineers." The lecture was delivered by Mr. Rajat Pashine, an esteemed alumni of the institution, who graduated in the batch of 2005. This session aimed to provide 2nd & 3rd year students and faculty with valuable insights into the emerging technical opportunities in the automotive sector and how engineers can leverage their skills in this rapidly evolving industry.

Objective of the Lecture

The primary objectives of the lecture were to:

- Illuminate the diverse technical opportunities available in the automotive industry.
- Explain how engineers, especially those in fields like software engineering, electronics, and instrumentation, play a crucial role in the ongoing transformation of the automotive sector.
- Discuss the emerging technologies within the automotive industry, including electric vehicles (EVs), autonomous systems, and advanced software-driven solutions.
- Offer practical advice to engineering students on the skills and qualifications needed to pursue a successful career in the automotive sector.

Overview of the Speaker

Mr. Rajat Pashine is an accomplished software engineer with over 15 years of experience in the automotive and technology sectors. After completing his graduation from SGSITS in 2005, he has carved a successful career path and currently holds the position of Principal Software Engineer at Harman International India Private Limited, a global leader in connected car technology. Mr. Pashine has contributed to several innovative projects in the automotive domain, making him a sought-after professional in the industry.

Key Highlights of the lecture

- **Emerging Trends in the Automotive Industry:**

  Mr. Pashine discussed the rapid transformation of the automotive industry, focusing on key trends such as the development of electric vehicles (EVs), autonomous driving technologies, and the increasing integration of software in automotive systems. He highlighted how software and electronics are now central to vehicle design and functionality.
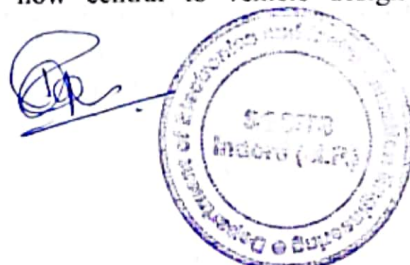
- **Technical Opportunities for Engineers:**

  The speaker emphasized the growing demand for skilled engineers in the automotive sector, particularly in the areas of embedded systems, software development, data analytics, and machine learning. He explained how engineers in fields such as software engineering, control systems, and instrumentation are crucial for developing the technologies that drive modern vehicles. He discussed the importance of engineers in designing and optimizing electric powertrains, battery management systems, energy-efficient solutions, and infrastructure for EVs.

- **Skills Required for a Career in Automotive Engineering:**

  The speaker outlined the key technical skills necessary for aspiring engineers to succeed in the automotive industry. These include proficiency in programming languages (such as C++, Python), knowledge of embedded systems, understanding of automotive electronics, expertise in data analysis, and familiarity with AI/ML tools. Additionally, Mr. Pashine emphasized the importance of soft skills like teamwork, communication, and adaptability.

- **Career Pathways in the Automotive Sector:**

  Mr. Pashine provided valuable insights into the career opportunities available to engineers in the automotive sector. He discussed roles in research and development, product design, manufacturing, and system integration, as well as emerging positions in autonomous driving and electric vehicle technology.

- **Q&A Session**

  During the session, Mr. Pashine encouraged students to ask questions, which led to an engaging discussion about the future of automotive technology and the diverse career opportunities within it. Mr. Pashine's responses were detailed and practical, offering students valuable career advice and encouraging them to stay ahead of the curve by learning new technologies and engaging in industry-relevant projects.

Student Engagement

The lecture saw active participation from the students, both in the offline and online formats. Students were highly engaged throughout the session, posing thoughtful questions during the Q&A, which reflected their keen interest in the topics discussed. The interactive nature of the lecture helped students understand not only the technical aspects of the industry but also the mindset and skills needed to succeed in it.

Conclusion

The Expert Alumni Lecture by Mr. Rajat Pashine was an invaluable session for students and faculty members alike. His insights into the automotive industry's current trends, challenges, and opportunities provided students with a clear understanding of how they can align their skills with the needs of the industry. The lecture successfully highlighted the critical role engineers play in shaping the future of transportation and technology, particularly in areas like electric vehicles, autonomous driving, and advanced software systems.
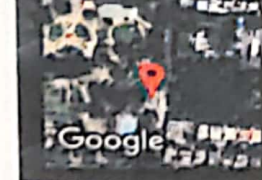
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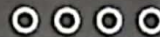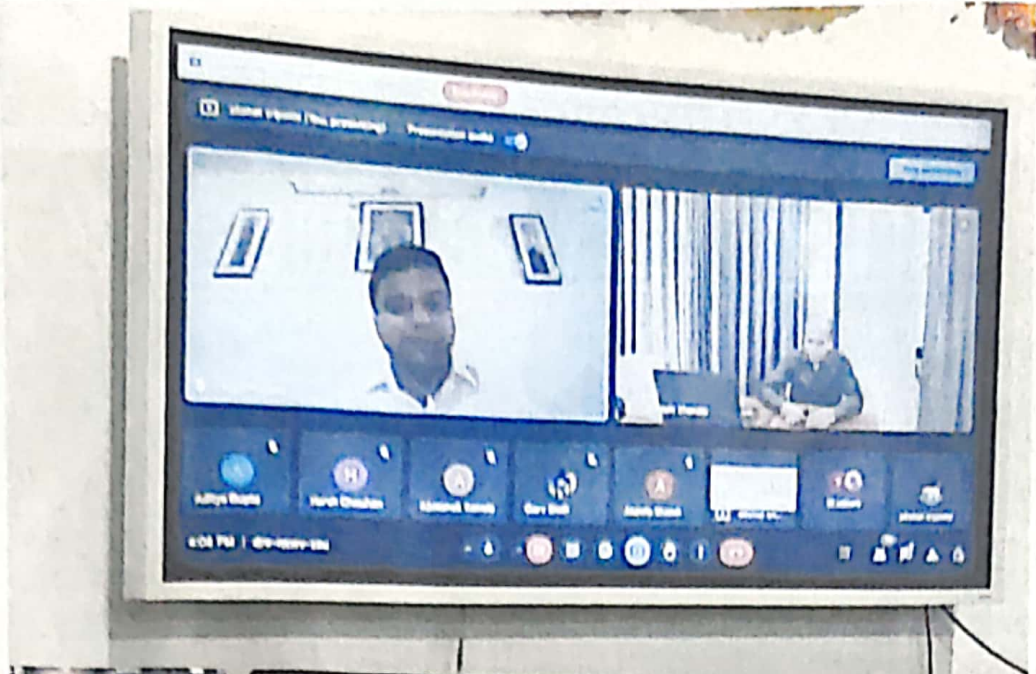
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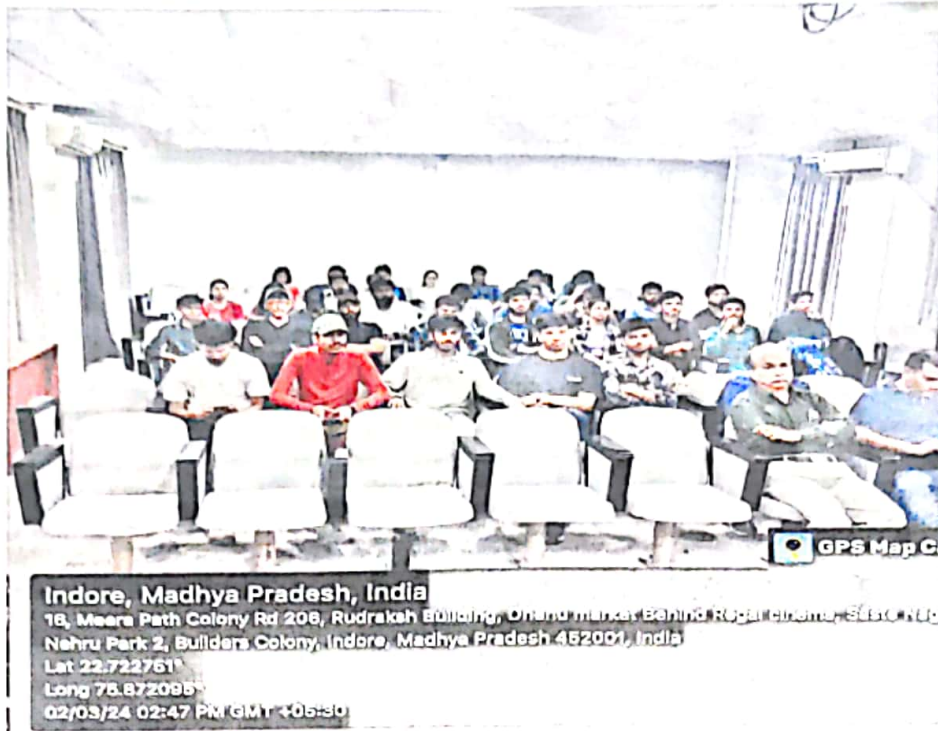02/03/24 04:08 PM GMT +05:30

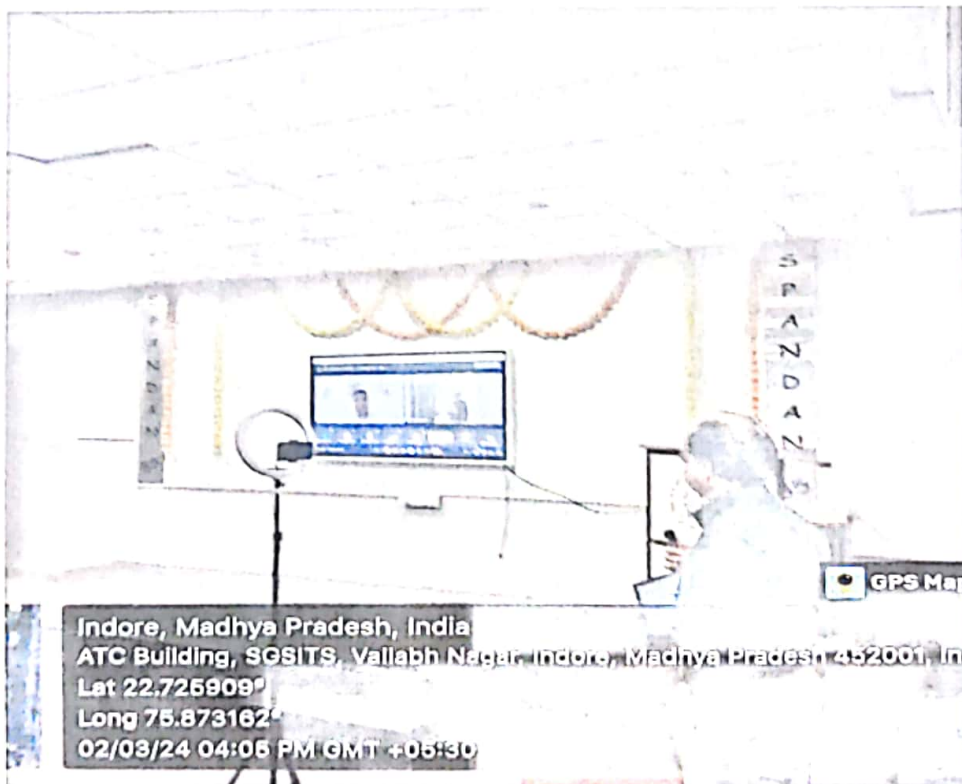Mr. Rajat Pashine delivering his lecture

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Students engaged in the lecture in offline mode

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Students & faculty members attending the lecture

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Dr. Rajesh Khatri, HOD-EI, delivering his vote of thanks for Mr. Rajat Pashine