Report on ROBOVERSE - CLUB Tech Talk from Industry Experts: TCS Robotics and Bosch Robotics

Tech Talk from Industry Experts: TCS Robotics and Bosch Robotics Report

On November 23, 2024, the Department of Artificial Intelligence and Robotics (AIR) at Dayananda Sagar University hosted a seminar-tech talk on "Future Opportunities in Robotics and AI," aimed to provide students with a vision of the evolving fields of robotics and artificial intelligence. The seminar featured prominent industry leaders from TCS and Bosch Industries, shared their invaluable expertise on the emerging trends, challenges, and career prospects within the robotics and AI sectors. The event was meticulously organized by Dr. Pramod Kumar Naik, Head of the AIR Department, and Prof. K. Sudha Deepthi, Manager of the Rexroth Bosch Innovation Lab at DSU. Their efforts facilitated engaging discussions between the students and industry professionals. Both TCS and Bosch highlighted the importance of innovation, practical skills, and continuous learning to stay competitive in the global tech industry.

Session: 1: Trends in Robotics and Autonomous Systems

Mr. Nijil George opened the session by presenting the latest trends in robotics and their impact on industries worldwide. He elaborated on how robotics, integrated with advanced AI, is transforming sectors like manufacturing, logistics, healthcare, and defense. The emphasis was placed on autonomous vehicles, drones, and intelligent robotic arms, showcasing their role in improving efficiency and safety.

He shared his perspective on the evolution of robotics, stressing the importance of multidisciplinary collaboration and Innovation. The session concluded with an engaging Q&A, where Mr. George encouraged students to explore research opportunities in robotics and pursue projects that address real-world challenges.

Session 2: Opportunities in AI and Robotics Product Development

Mr. Rohan Dalmia, the Product Development Lead and Solution Architect for AI & Robotics at Bosch Global Software Technologies, Bangalore. An alumnus of IIT Bombay, Mr. Dalmia shared his invaluable insights on the evolution of AI and robotics in both society and industries. During his session, he highlighted how AI and robotics are revolutionizing sectors such as manufacturing, healthcare, and transportation, and the growing role of these technologies in shaping future job opportunities. He also spoke about the rapid advancements

in AI and robotics, emphasizing the skills that students need to cultivate in order to thrive in these fields.

Throughout the seminar, **Mr. Dalmia**, along with experts from **Bosch**, provided a comprehensive understanding of the critical role that robotics and AI play in today's industries. They discussed the wide-ranging applications of these technologies, from **automation to smart systems**, and the increasing demand for skilled professionals who can drive innovation. The session encouraged students to look at **AI and Robotics** as key enablers of future industrial growth and societal progress.

Key Outcomes

- **Industry Connections**: Students will have the chance to network with professionals, mentors, and potential future employers in AI and robotics industries.
- Collaborative Opportunities: Students will be able to connect with like-minded peers and industry professionals, fostering collaborations on research, projects, or internships.
- Cross-Industry Applications: Students will understand how AI and robotics are used across various sectors, giving them a broader perspective on how these technologies are applied in fields like healthcare, automotive, finance, and logistics.
- **Keeping Up with Industry Changes**: Students will be updated on the future directions of AI and robotics, ensuring they are prepared for upcoming technological trends and disruptions.

Students gained a clearer understanding of the skills and knowledge that industries are looking for in future employees, allowing them to tailor their learning and development efforts accordingly. They found more opportunities to connect with leading industry professionals, opening doors to internships, projects, and career opportunities with top companies like TCS, Bosch, and others. They also learned about the key technical and soft skills needed to succeed in AI and robotics careers, such as programming, problem-solving, creativity, and teamwork.

Feedback and Impact on Students

The seminar on **Future Opportunities in Robotics and AI** provided students with an invaluable opportunity to engage with industry leaders and gain practical insights into the rapidly evolving fields of AI and robotics. By learning directly from experts at **TCS and Bosch**,

students were able to understand how these technologies are transforming industries and creating new career opportunities. This exposure has equipped them with a clearer vision of the skills required to succeed in the field, motivating them to develop both technical and soft skills that are crucial for future success.

Overall, the seminar has provided students with a solid foundation for their careers, giving them the confidence and knowledge to pursue opportunities in AI and robotics while also encouraging them to stay adaptable and forward-thinking as the industry continues to evolve.

Conclusion

In conclusion, the seminar on "Future Opportunities in Robotics and AI" was a resounding success, showcasing the exceptional efforts of the Department of Artificial Intelligence and Robotics at Dayananda Sagar University (DSU). This event was a great opportunity for students to gain valuable industry insights and explore the exciting career prospects in AI and robotics. We would like to extend our heartfelt thanks to Dr. Pramod Kumar Naik, Chairperson of the Department, for his visionary leadership, Prof. K. Sudha Deepthi, Manager of Rexroth Bosch Innovation Lab, for her tireless support, and Dr. R. Bhaduri, Chief Advisor, for their guidance and commitment to making this event a reality at DSU. Their vision for excellence inspires everyone.

We also extend our sincere gratitude to the student coordinators: **Krishna Siddharth, M. Getha, Umar, Riaan Oswal, and Shubhkarman** whose hard work and dedication were instrumental in ensuring the smooth execution of the seminar. Their efforts played a crucial role in the event's success, and we truly appreciate their contribution. This event reflects the Department's ongoing commitment to providing students with opportunities to learn and grow in the rapidly advancing fields of AI and robotics.



Figure 12. Roboverse club- Tech talk poster



Figure 13. Mr. Nijil George, TCS Robotics, Bangalore Division



Figure 14. Students attending the Tech Talk



Figure 15. Mr. Rohan Dalmia, Product Development Lead and Solutions Architect for AI and Robotics, Bosch Global Software Technologies, Bangalore Division



Figure 16. Students attending the Tech Talk



Figure 17. Guest of Honour along with Faculties and Co-ordinators