Alva's Institute of Engineering & Technology

Shobhavana Campus, Mijar, Moodbidri, D.K – 574225

Department of Information Science and Engineering

in association with

Coders of Alvas's – Students' Club

and

Techgeekz – ISE Students' Forum

"Hands-on workshop on IOT insights"

15th & 16th November 2024

Venue: ISE Lab

Event Report

The Department of Information Science and Engineering at Alva's Institute of Engineering and Technology, in collaboration with Coders of Alva's – Students' Club and Techgeekz – ISE Students' Forum, organized a Hands-on workshop on IOT insights on 15th and 16th November 2024. The session was conducted in the ISE Lab and facilitated by Mr.Himanshu Rangadhol.

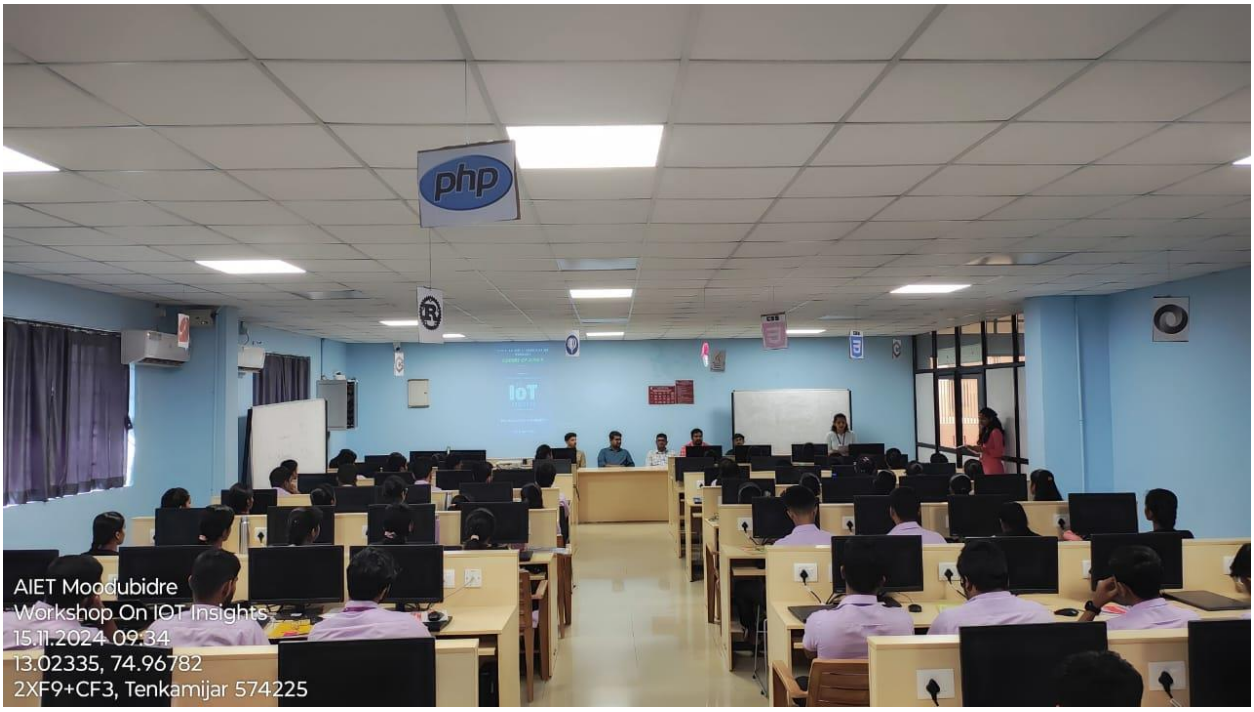
Mr. Himanshu Rangadhol is an accomplished professional with 12 years of expertise in Embedded Design and Development**,** Consumer Electronic Product Development, and Automation Tool and Environment Development**.** A graduate in Electronics and Communication Engineering from PESITM**,** Mr. Himanshu has an illustrious career trajectory, including roles such as Junior Research Fellow at IISc Bengaluru in Instrumentation and Applied Physics, Product Developer and Head of Operations at Qreatin, Head of Innovation at Oscki Labs, and Co-founding Director and CTO at Oscki Labs Limited. He has also served as a Research Consultant for AIET and is currently an Associate Technical Specialist at Qorix, previously associated with KPIT Technologies Pvt Ltd's product team.

Objectives

The objective of IoT Insights Workshop is to provide participants with a comprehensive introduction to the principles and applications of IoT, while developing practical skills like LED interfacing, C programming, and using essential IoT tools. The workshop aimed to guide participants in project development, from identifying problems to selecting components and defining expected outcomes. It also emphasized innovation, encouraging creative solutions to real-world problems, and introduced useful online resources for IoT projects. By fostering teamwork and bridging the gap between theory and practice, the session aimed to inspire further exploration and growth in IoT technologies.

Participants

A total of 62 students from the V Semester B.E. ISE and 10 students from the V Semester B.E. ICB actively participated in the session.



Session Highlights

Day 1: 15th Nov 2024

Mr. Himanshu introduced the participants to the world of IoT, detailing its applications, significance, and potential in transforming industries. He demonstrated LED blinking and its interfacing, showcasing different blinking patterns and their programming logic. This was followed by an introduction to C programming, covering its basics and importance in IoT projects. The session also highlighted the essential requirements for IoT projects, emphasizing the need for proper hardware, software, and tools. Additionally, participants were provided with a list of relevant websites and online resources that are pivotal for IoT development and project execution.

Day 2: 16th Nov 2024

In day 2 the session focus shifted to hands-on guidance and project-based learning. Participants were divided into groups and asked to ideate and work on mini-projects. Mr. Himanshu provided personalized guidance to each group, helping them articulate their problem statements, devise proposed solutions, identify suitable components, and set realistic expected outcomes. This interactive session enabled participants to translate theoretical knowledge into practical implementation. Furthermore, Mr. Himanshu introduced various IoT tools, explaining their functionalities and demonstrating their use in real-world scenarios, enabling participants to understand the practical aspects of IoT development.

The workshop concluded with participants gaining a thorough understanding of IoT fundamentals, hands-on exposure to tools and techniques, and valuable insights into project development. Mr. Himanshu's wealth of experience and engaging teaching style made the session highly informative and inspiring, encouraging participants to explore innovative solutions in the field of IoT. This successful event served as a stepping stone for students, fostering their technical skills and creativity while building a strong foundation in IoT.

Feedback

The IoT Insights Workshop offered valuable theoretical and practical knowledge, with hands-on sessions on LED interfacing and C programming. Mr. Himanshu Rangadhol's expertise made complex topics easy to understand, and the guidance on project development was highly beneficial. Overall, the workshop was well-organized and inspired participants to further explore IoT technologies.

Conclusion

The workshop provided a practical learning experience, equipping participants with foundational knowledge and hands-on skills in IoT. Mr. Himanshu Rangadhol's expertise and interactive approach inspired participants to explore innovative solutions in IoT projects. The event was a resounding success and a valuable opportunity for budding engineers to delve into the world of IoT.

Mr. Pradeep Nayak

Faculty Coordinator
Coders of Alva's and Techgeeks

Dr. Pradeep V

HoD-ISE