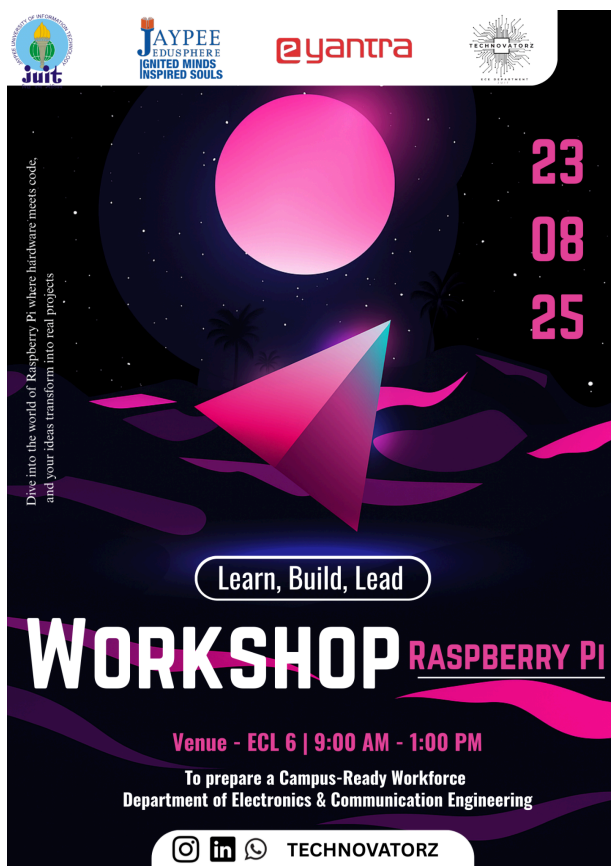


## Hands-on Workshop on Raspberry Pi Workshop – Learn, Build, Lead!

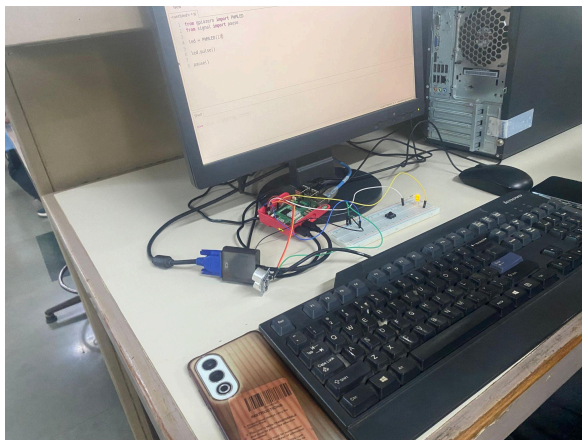
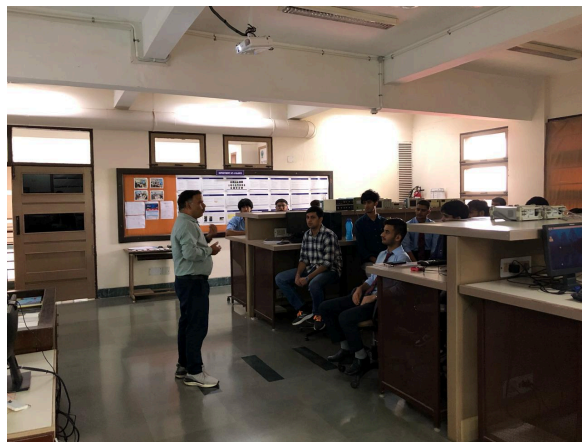
23rd August 2025

### Report

The **TECHNOVATORZ Club**, in collaboration with **eYantra-JUIT**, under the **ECE Department, JUIT**, organized a one-day hands-on workshop titled “**Raspberry Pi Workshop – Learn, Build, Lead!**” on 23rd August 2025. Conducted and coordinated by **Dr. Vikas Baghel (ECE Department)**, the workshop began with an introduction to Raspberry Pi, covering its features, architecture, operating system, and applications in IoT, robotics, and automation. Participants were guided through the hardware setup, including booting the OS, connecting peripherals, configuring GPIO pins, and attaching external devices such as the Raspberry Pi Camera Module, thereby gaining a complete overview of its capabilities.



In the second half, the focus was on hands-on implementation. Students explored Python-based programming on Raspberry Pi, carrying out practical exercises like controlling LEDs, reading sensor values, and experimenting with camera applications such as image capture and basic video streaming. These activities gave participants a real sense of how Raspberry Pi integrates hardware and software to build smart solutions.



The interactive nature of the session encouraged teamwork and creativity, while discussions on real-world projects highlighted its relevance in research, surveillance, automation, and AI-based systems. The workshop concluded successfully, equipping students with both technical skills and innovative ideas for future projects. A **special thanks to Prof. Rajiv Kumar, Head of ECE Department**, for his constant support and motivation, which played a key role in the success of this workshop.