21-07-2022

Report on
Technical Talk on "DESIGNING CYBER PHYSICAL SYSTEM FOR IoT APPLICATION"
Under IEEE APSIT Student Branch.

Resource Persons & Coordinator

1. Dr. Ashwini Gajarushi[1]
2. Dr. Sachin Paramane[1]

[1]Technology Incubation Hub-Internet of Things, IIT Bombay.

Venue: 008, Seminar Hall

Date: 20th July, 2022

Time: 3:00 pm to 4:30 pm

Total number of attendees: 60

About the Program:

IEEE APSIT kicked off its roster of events for the academic year 2022-23 in a grand manner, with a technical seminar on the topic "Designing Cyber Physical System for IoT Application". The event was held on 20th of July 2022, in seminar hall 008 of APSIT. The esteemed lecturers for the same were Dr. Ashwini Gajarushi and Dr. Sachin Paramane. Dr. Gajarushi is the senior technical officer, TIH-IoT at IIT Bombay; while Dr. Paramane serves as the Chief Technology Officer at TIH-IoT at IIT Bombay. Ms. Radnyi of BE EXTC was the host for the day.

The seminar began at 3:00 p.m. with the host welcoming the dignitaries and the audience. After introductions of the guest lecturers were made by the host, bouquets were offered to them as a token of welcome.

Figure 1: Nahid Madam, welcoming the guests.

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The host spoke about IoT briefly, after which Dr. Gajarushi took over. She started by reminiscing about life during lockdown, and how technology aided humans during this time. She emphasized on how engineers of the past have created the technology we use today, and thus the students of today will create technology humans will use ten years hence. The importance of students today learning technology thus established, ma'am then moved on to the core topic of IoT. She defined the Internet of Things for the uninitiated, and visualised the IoT system. Using interesting presentation slides, she explained in detail the involvement of IoT for cyber physical systems as well as embedded systems. She then spoke at length about battery-less systems, and provided sensors as a solution for energy harvesting in the same. The session concluded with a thought-provoking quote by the former director of IIT Delhi.

Figure 2: Dr. Ashwini Gajarushi interacting with students.

Dr. Paramane was handed the mic next. He introduced the audience to Technology and Innovation Hub (TIH) of IIT Bombay. He showed how the programs of TIH-IoT are mapped to TRLs (Technology Readiness Level), thus showing the value of the programs with respect to career and knowledge. He then gave information about the various fellowships offered to budding innovators and entrepreneurs, including the CHANAKYA fellowship, Entrepreneurs in Residence (EIR) program and AYANSH start-up and spin-off program. Dr. Gajarushi returned to the stage to talk about the courses offered TIH -IoT, and encouraged the students in the audience to sign up for the same.

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Both the sessions thus concluded, Ms. Radnyi offered the vote of thanks. The event came to a satisfactory end at 4:30 p.m. The audience consisted of 60 students from all branches. They were quite active and interactive during the talk, and gave favourable feedback of the event. It can thus be safely concluded that the event was a success.

Post session both dignitaries had a meeting with APSIT Dean Academics and HoDs to discuss further tie-ups and establishing a centre of excellence for IoT at APSIT.

Figure 3: From Left to Right, Prof. Sachin Malve (HoD Comp, APSIT), Prof. Atul Deshpande (Dean Academics, APSIT), Dr. Ashwini Gajarushi (Senior Technical Officer, TIH-IoT, IIT Bombay), Dr. Sachin Paramane (CTO, TIH-IoT, IIT Bombay), Prof. (Dr.) Kiran Deshpande (HoD IT, APSIT), Prof. Selvin Furtado (EXTC, APSIT)

Appendix

Figure 4: Technical Talk banner