Live Projects on

Artificial Intelligence in Embedded Systems

When thinking about Artificial Intelligence (AI), most of us probably think of walking robots and talking computers. However, that's not really the case. Artificial Intelligence is more about building intelligent systems with decision-making abilities.

Over the last few years, embedded systems have reached a certain level of "smartness". More and more smart devices are being launched every month. We are already at a point where artificial intelligence in its very basic form has found its way into the heart of embedded devices. For instance, smart home lighting systems that automatically turn on and off based on whether anyone is present in the room.

There are plenty of examples in the simple of automation to AI in driverless vehicles. So, the future is AI and embedded systems and co-design.

So let's look at these aspects in this **three months training program**: one month in winter and two months in summer. This is not just training but to practice on industry sponsored live projects. We plan to cover from system design to software development using following:

Technologies:

- ❖ IOT system design using NodeMCU
- ❖ DSP and Image Processing using Code Composer Studio, Python and Texas DSP
- ❖ Open CV and Raspberry –PI for IoT and IP
- ❖ Software & Hardware co-design, Low power RTOS using Texas MSP
- ❖ AVR ATmega Closed loop Control Systems
- ❖ Soft computing techniques

Benefits/Takeaways / Motivation:

- ❖ Hands-on experience by the industry experts
- ❖ The certificate of course completion & Evaluation by industry and S.P.I.T.
- ❖ Best project will be awarded the certificate of honor and stipend to work ongoing projects
- ❖ Six months **paid internship in core industry** for 8th semester students and converting into placement.

Resource Persons:

- ❖ Dr Y S Rao
- ❖ Dr R R Sawant
- ❖ Dr D R Kalbande
- ❖ Mr. Bhavin Kamdar
- ❖ Industry

Schedule:

- ❖ Small groups based on the registrations
- ❖ Flexibility in timing
- ❖ Projects could be work from home
- ❖ Guidance/Mentoring/group discussions: late evenings, weekends

Registration:

https://docs.google.com/forms/d/e/1FAIpQLSdMDoc0jm0y_axT9O-7Ofsv4_6bLrZNBYS2nDj6PDPGsbI_0A/viewform?vc=0&c=0&w=1

Participant Registration Fee:

- ❖ The program is open to all the engineering colleges, Research Scholars, students and other working professionals are also, eligible.
- ❖ For S.P.I.T students Registration Fee is Rs. 10,000/- + GST Per Attendee
- ❖ For other students Registration Fee is Rs. 15,000/- + GST Per Attendee (The fee includes training, certification, and **free IoT kit**)

Payment Details:

Cheque should be in favor of: **S.P.I.T Allied Division**