About VIT

Vellore Institute of Technology (VIT) was founded in 1984 as Vellore Engineering College by Chancellor Dr. G. Viswanathan. VIT was established with the aim of providing quality higher education on par with international standards. The credentials of VIT in academics and research, has placed VIT in the 8th position as a University, 11th in research and 11th in Engineering in India by NIRF, Govt. of India Ranking. The QS world ranking has given 4 STAR rating to VIT, with that VIT becomes the first institution in India to have the 4 STAR rating. In addition to this, the consortium of industries, FICCI has adjudged VIT as the "Excellence in Faculty". VIT has the record of publishing a maximum number of SCOPUS Indexed Research Journal papers, among Indian Universities, overtaking all the premier institutions. VIT has also completed 4 cycles of NAAC accreditation and has been rated as "A++" grade institution. VIT is No.1 private university for Innovation (2019) as recognized by ARIIA, Government of India. VIT has introduced many innovations in academic processes like Fully Flexible Credit System, Project Based Learning, fully digitized academic portals that assist students in equipping themselves for 2025 marketplace. Students are also motivated to opt twin degree program with various reputed universities across the globe. Every year, students get scholarships to do their final year projects abroad under the Semester Abroad Program (SAP).

About School of Electrical Engineering

The School of Electrical Engineering (SELECT) is a part of VIT since its inception. The School has grown tremendously over years and is now recognized as one of the major engineering schools in India. The school offers B.Tech. (Electrical and Electronics Engineering), B.Tech. (Electronics and Instrumentation Engineering), M.Tech. (Power Electronics and Drives), M. Tech. (Control and Automation), Ph.D., and Integrated Ph.D., in Engineering. SELECT has over 96 faculty members who pursued their UG, PG and Doctoral degrees from top-notch universities. The school has industry sponsored advanced laboratories for performing world class research and consultancy. Danfoss Advance Drives Lab, Schneider Electric Smart Energy Monitoring Lab, Fluke Testing and Calibration Lab, Q-Max Automated Test Engineering Lab (Alumni Sponsored Lab) and NxP Semiconductors, India, have established Centre of Excellence for students R&D activities under the guidance of faculty members and industry experts. SELECT secured the 8th rank across the nation and ranked within top 250 in EEE across the world as per the NIRF and QS Ranking respectively.

About this Program

Internet of Things (IoT) refers to the collective network of connected devices and the technology that facilitates communication between devices and the cloud, as well as between the devices themselves. With the advent of inexpensive sensors and high bandwidth communication system, presently billions of devices are connected to the internet. This indicates that devices including wrist watches to mobility vehicles, farms to defence, can use sensors to collect data and respond intelligently to users. IoT concept has given the world an advanced level of accessibility, availability, interoperability, scalability, integrity and confidentiality in terms of device connectivity. Prominently, Artificial Intelligence (AI) which mimics the human intelligence to perform tasks has been acted as the driving force behind developing technologies for industrial automation, medical applications, agriculture, IoT applications, cybersecurity services and many more. AI unlocks the true potential of IoT by enabling networks and devices to learn from past decisions, predict future activity, and continuously improve performance and decision-making capabilities. which is known to be the AI of things (AIoT).

This workshop aims to give a series of technical conceptual presentations along with practical demos-based sessions using Arduino with several technologies on various topics related to IoT and AI. The workshop enables the participants to gain knowledge of interfacing hardware components (including sensors and actuators) with Arduino IDE through hands-on sessions. With the developed prototype, the sensor's output will be visualized on IoT platforms or web server or android application using a wireless communication protocol, and device will also be controlled remotely. Faculties who wish to explore the realm of Arduino based IoT applications can participate in this workshop. This programme is specifically designed to provide the practical knowledge to the aspiring and AI enthusiasts. The hands-on sessions will explore the in-depth knowledge in AI techniques.

VIT®

Vellore Institute of Technology

(Deemed to be University under section 3 of UGC Act, 1956)

Two Days Skill Enrichment Workshop

On

Exploring Artificial Intelligence Techniques with Arduino & Python – Hands-on

08-09th, July 2023.

Organized by

School of Electrical Engineering,

Vellore Institute of Technology, Vellore

Topics to be covered

- Installation of Arduino IDE
- Interfacing of Arduino with sensors & actuators.
- Importing and visualization of data
- Introduction to Artificial Intelligence
- Python programming for AI based applications.
- Deployment of AI application in Arduino.
- Internet of Things (IoT) based applications.

Objectives of the workshop

- To provide the knowledge on Arduino controller and its programming
- To interface various sensors & actuators with the Arduino controller.
- To learn Python code for AI applications.
- To connect various things and to visualize the captured data from the sensor in the cloud and to control the devices remotely.

Resource Persons

- **Dr. N. Selvakumar**
  Associate Professor, SELECT VIT, Vellore.
- **Dr. R. Vijayapriya**
  Assistant Professor, SELECT, VIT, Vellore.
- **Dr. Marimuthu R**
  Associate Professor, SELECT, VIT, Vellore.
- **Dr. Arun S. L**
  Assistant Professor, SELECT, VIT, Vellore.

Registration Fee: Rs. 750*/-

***Inclusive of GST**

(Registration fee includes digital materials, working lunch and snacks. e - certificate will be issued to all the registered participants). Use the following link to make online payment.

https://events.vit.ac.in/

Note:

*** The number of participants is strictly limited to 60 based on first come first serve.**

***Participants who need accommodation can find the details in the following link.**

https://tinyurl.com/48hppsjf

Important Dates:

Last date for registration: **05th July, 2023**

Contact Details:

Dr. Marimuthu R, Associate Professor, SELECT, VIT, Vellore. Mobile: +919976494888

Dr. Arun S. L, Assistant Professor, SELECT, VIT, Vellore. Mobile: +917418167399

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Dr.Vijaya Priya R, Assistant Professor, SELECT
Dr. Marimuthu R, Associate Professor, SELECT
Dr. Arun S. L., Assistant Professor, SELECT