



Ref:Workshop-5/WECON-CU/2015

Hands-On Workshop on Arduino& Intel Galileo

Workshop Objectives:

The workshop will focus on getting you up and running with Arduino and Intel Galileo quickly, so that you will understand the basic procedures for working with Arduino and can explore further on your own. The workshop is purely hands on approach and aims to getting familiarity-of-use with commonly used components in robotics projects.

About ARDUINO

Arduino is a tool for making computers that can sense and control more of the physical world than your desktop computer. It's an open-source physical computing platform based on a simple microcontroller board, and a development environment for writing software for the board. Arduino can be used to develop interactive objects, taking inputs from a variety of switches or sensors, and controlling a variety of lights, motors, and other physical outputs. The boards can be assembled by hand or purchased preassembled; the open-source IDE can be downloaded for free. The Arduino programming language is an implementation of Wiring, a similar physical computing platform, which is based on the Processing multimedia programming environment.

About INTEL GALILEO

Intel Galileo is the first in a line of Arduino-certified development boards based on Intel x86 architecture and is designed for the maker and education communities. Intel Galileo combines Intel technology with support for Arduino ready-made hardware expansion cards and the Arduino software development environment and libraries. The development board runs an open source Linux operating system with the Arduino software libraries, enabling re-use of existing software, called "sketches". Intel Galileo can be programmed through OS X, Microsoft Windows and Linux host operating software.

Workshop Topics

- Introduction to Arduino Platform
- Getting started with the Arduino IDE to start writing your first program
- Interfacing of LED with Arduino
- Interfacing Motors with Arduino Board
- Design a robot using Arduino
- Sensor Interfacing



- Introduction to Intel Galileo Platform
- Various peripherals interfacing with Intel Galileo

Resource Person:

1. Mr. Gurjinder Singh
Assistant Professor, Chitkara University, Punjab
2. Ms. Vernica Gupta
Research Assistant, Chitkara University, Punjab

Who can attend?

- UG students working in area of robotics , microcontrollers , embedded systems
- Researchers (Masters, Doctoral students and Fellows) with thesis in embedded system
- Academicians for enhancing skills in delivering embedded systems at Institute/University
- Design engineers from industry

Pre-requisites

- Basic understanding of C programming
- Elementary knowledge of microprocessor & microcontrollers.

Registration

- Prior registration for the workshop by submitting the duly filled registration form is mandatory before **March 16**. Registration Form & Registration Process is available at Registration Page ([CLICK HERE](#))
- There is a nominal registration fee for attending the workshop. Please visit Registration Page ([CLICK HERE](#)) to know the fee structure.
 - There is a special discount on Fee for IEEE & IETE members
- For Conference Authors, workshop registration is absolutely FREE.

Contact

If you have any queries, please contact Mr. Vishal Mehta (vishal.mehta@chitkara.edu.in , 9888836451)