

2 Days Workshop on Android Controlled Robotics

SESSION - 01

Introduction to Android Technology
History of Android
Android Features
Introduction of Robotics
Introduction of Embedded system
Introduction of Microcontroller.
Introduction of AVR Microcontroller.
Introduction of Atmega8
Atmega8 features.
Difference between RISC and CISC.
Introduction of microcontroller programming.
Introduction of embedded C.
Software and programming.
Program for led glow
Program for led blinking.
Pattern on LED.

SESSION - 02

Introduction of Sensor
Type of Sensor.
Introduction of IR Sensor
Difference between photodiode and led.
Complete description of IR Sensor circuit.
Interfacing of IR sensor with microcontroller
Programming of IR sensor.
Introduction of Motor
Type of Motor
Difference between AC Motor and DC Motor.
Introduction of L293D
Feature of L293D
Introduction of H-Bridge
Interfacing of motor with microcontroller.
Programming for motor.

SESSION - 03

Introduction of communication on microcontroller

Type of communication

UART on ATmega8

UART Register

USB to TTL communication

Program for serial communication with microcontroller

Introduction of Bluetooth.

Interfacing of Bluetooth with microcontroller.

Program for Bluetooth.

Definition and description of Bluetooth control robot.

Program for Bluetooth control robot.

Android application for robot control

Definition and description of Androbotrix.

Program for robot control by Android application.

SESSION - 04

Students will get opportunity to work on LIVE project seeing live presentation under guidance of our trainer and developer which will be helpful to develop and enhance their technical skills.

After completing hands on session we conduct Online / Offline Championship @ Zonal Center and select Zonal Winners from Zonal Championship, they get wild card entry to participate in finale @ IISc, Bangalore.