

Android Controlled Robotics

Control Bots with your smart phone by making your own Android Apps

Session 1:

- Microcontroller Introduction
- An Overview of Open Hardware
- AVR board layout.
- What are the resources available?
- Atmega microcontrollers' description
- Interfacing LEDs
- Interfacing Switches
- Interfacing Buzzers.

Session 2 Building Robot

- Introduction to Robotics
- Fundamentals of Robot Locomotion
- Building the Chassis
- Controlling Motors.
- Fundamentals of H-bridge circuit and Motor Driver circuitry

Session 3 Android Application Development

- Starts with an Android introduction and IDE Introduction with some Basic Android Application
- Android Introduction
- Android History and evolution
- Android Versions
- Android Features
- IDE Introduction (Eclipse)
- Dalvik Virtual Machine
- Hello World Application
- Button & Toast Application
- Android with Bluetooth Serial Application

Session 4:

- Testing Final Project
- Fundamentals of Bluetooth.
- Interfacing Bluetooth with the Atmega circuit.
- Building Atmega circuit to control robot