Sixth Sense Robotics

Topics to be covered

- Introduction to Robotics and Combination of Robotics with Sixth Sense
- Microcontroller Programming
- Machine Control
- Introduction to Computer vision
- Digital Image Processing in Matlab
- Image Manipulation in Matlab
- Video acquisition and Manipulation

HANDS ON SESSION

The final aim is to build various vision based machines.
Robots that will be covered on this day include (apart from discussing any ideas from the participants)

- **LED and Motor Control** - Topics to be covered HANDS ON SESSION Students Learn the basic code to program the board. They learn how to glow the LED's and make patterns on them , secondly they learn how to control the motors.
- **Computer Controlled Robot** - Students Learn to control the Robot by sending commands through the Keyboard. It is same like playing a racing game and control your car using ASWDX.
- **Ball Following Robot** - The Students make a Robot which shall be able to follow a ball using the camera attached. The programming and concept are taught in detail.
- **Change a PowerPoint Presentation with your hands**. - Amazing it is , now use sixth sense technology to control a power point presentation by using your hands, no Mouse or Keyboard is required.
- **Control Media Player with Hand Movements**. - Also learn to control your VLC Media player using your hands. Just wave the hand to stop or play , move your hand to the left to reverse or right for fast forward.

And Much More…..

- Assembling the Kit
- Writing the codes
- Burning the codes
- Finally Run the Bot