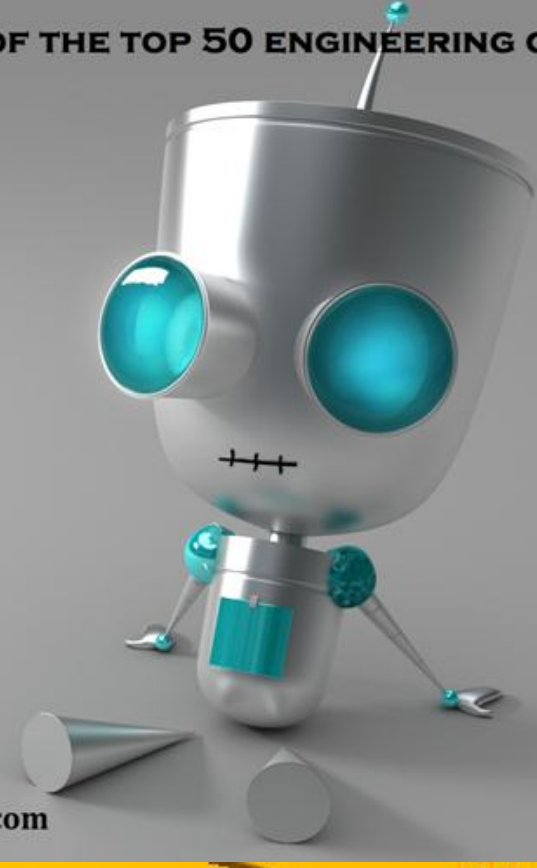
Sixth Sense Robotics

ROBOTECH LABS

PVT. LTD.

OUR PRESENCE IN 25 BEST COLLEGES OUT OF THE TOP 50 ENGINEERING COLLEGES

- Indian Institutes of Technology , Kharagpur
- Indian Institutes of Technology , Bombay
- Indian Institutes of Technology , Delhi
- Indian Institutes of Technology , Guwahati
- Indian Institutes of Technology , Roorkee
- Indian Institutes of Technology , Ropar
- Indian Institutes of Technology , Hyderabad
- Indian Institutes of Technology , Gandhi Nagar
- Indian Institutes of Technology , Rajasthan
- Indian Institutes of Technology , Mandi
- Indian School of Mines, Dhanbad
- BIT Mesra
- ABV – IIIT , Gwalior
- Motilal Nehru National Institute of Technology, Allahabad
- Malaviya National Institute of Technology, Jaipur
- Dr. B R Ambedkar National Institute of Technology
- National Institute of Technology, Kurukshetra
- National Institute of Technology, Raipur
- National Institute of Technology, Warangal
- Institute of Technology , Nirma University
- RVCE , Bangalore
- Chaitanya Bharathi Institute of Technology , Hyderabad
- Amrita School of Engineering , Coimbatore
- IIST , Trivandrum



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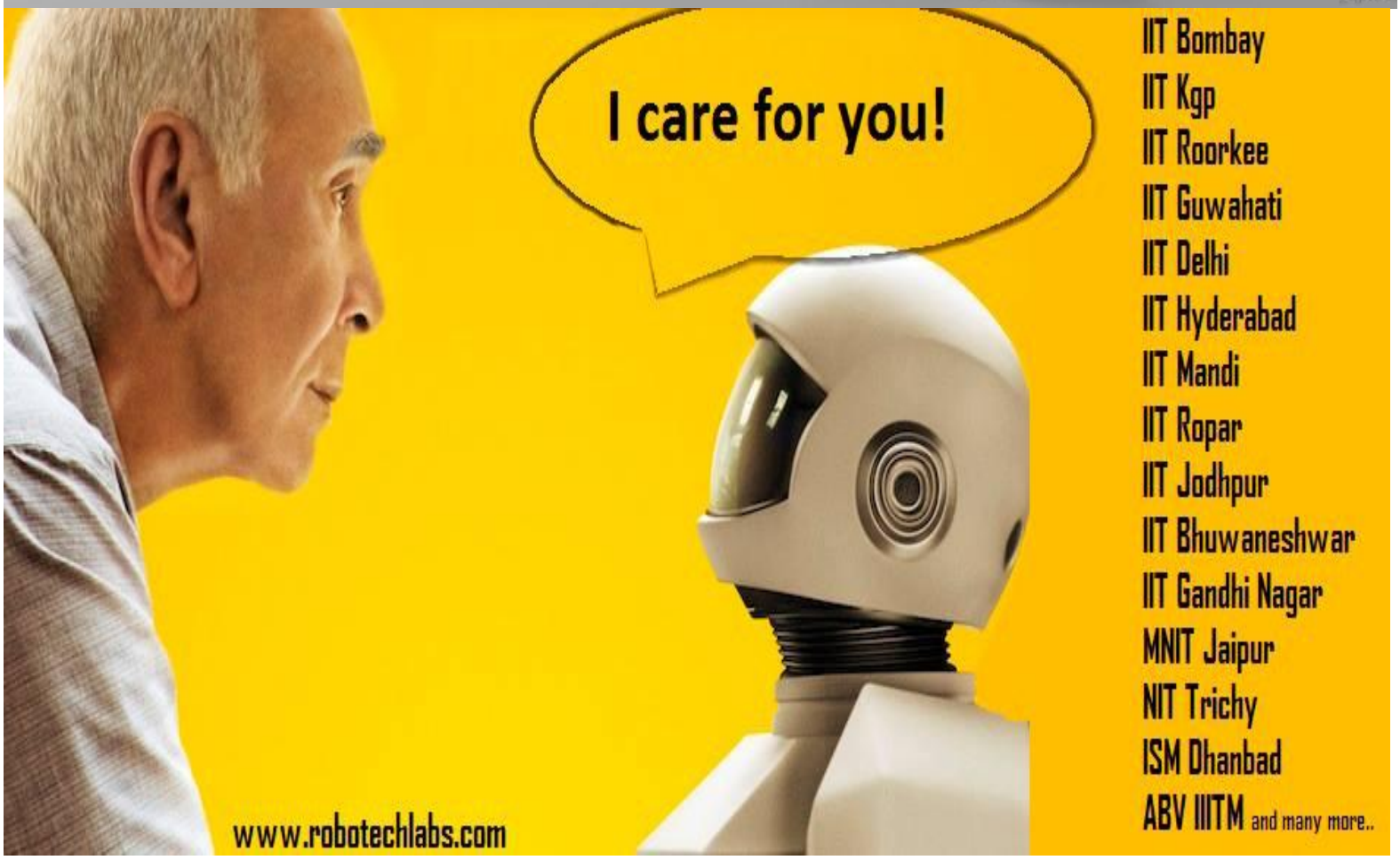

The workshop is a secure platform for students to enter into the field of robotics and work on image processing .The workshop helps the students to learn all the basics and apply them in reality using our kits.
The workshop helps the students to fight all the competitions related to robotics , Image processing , Aerial Robotics etc.
The workshop would taken up by the people in the industry having immense experience at the international level in the field Image Processing .

The details of the workshop are as follows:

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

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
- Go for Competition.

DURATION

We conduct workshops on two consecutive days. Each day has an eight hours session (in total 16 hours). This is properly divided into theory and hands-on sessions.

In the end we organize a small competition among the participants of the workshop so that they get real feel of competitive environment.

CHARGES

The charges are
Individual Registration: Rs 2500 per student with free kit OR
Team Registration: Rs 5000 per team (5 members) with free kit

The Charges includes:

- Training fee of the 2 day workshop
- Handouts and training material
- Information CD
- Participation certificate
- Additionally, a detailed manual will also be provided to each participant

The kit includes

Part	Quantity
Atmega Based Microcontroller board	One
USB Programmer	One
Wheels	Two

Castor Wheels	Two
Chassis (Robot Body)	Three Parts
DC Motors	Two
Software and Study Content	One
Connecting Cables	One Bunch
Nuts and Bolts	One Packet
Screw Driver	One
Battery (9V)	Two
IR Sensors	Two
Atmega IC	One
Motor Driver IC	One
MAX 232	One
7805	One
LM324	Two

CERTIFICATION POLICY

Certified by RCSA Canada Certified Robotech Labs Pvt Ltd and Professionals from IIT Roorkee.

Contact us: Email-workshops@robotechlabs.com
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