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RoboTech @ DTU

**Workshop & Exhibition on Complete Designing of Defense Robots,
Commercial Robots & Humanoid Robots**

Brought To you by

**Omnipresent Robot Technologies and Team AIR &
GATIK**

Would you like to build your own cool robots? Winning robotics competitions? Perusing a MS/PhD deg in Robotics/AI abroad? Becoming an Entrepreneur in upcoming Robotics Field? Securing a great job in Robotics & AI?

Learn to Design:

1. Your Own Robot Control Hardware
 - a. Working with Open Source Hardware
 - b. Understanding Microcontroller Basics
2. Motor Control of DC and Servo Motors
3. Building Drive /Chassis, Stair Climbing bots
4. Wireless communication and control
5. Interfacing with various sensors
 - a. Ultrasonic sensor, Light and Proximity sensor
 - b. Touch Sensor, GPS and INS
6. Robot Perception Software
 - a. Obstacle Detection and Avoidance
 - b. Waypoint Navigation, Line Following
7. Design Robot Brain
 - a. Decision Arbiter
 - b. Machine Learning

8. Designing Real World Robots (with Live Demo)

- a. **Humanoid Robots (GATIK, India's first indigenous Humanoid)**
- b. Unmanned Ground Robots, DARPA Robotics Grand Challenge
- c. Unmanned Aerial Robots (Fixed Wing and Quad Rotor)
- d. Vacuum Cleaning Robots

Dates:

Dec 17th (Inauguration, Orientation), Dec 18-19(1st -2nd yr), Dec 21-22(3rd &4th yr, PG, Faculty, Non DTU students). Work shop duration 3 Days.

Key Speaker: Aakash Sinha

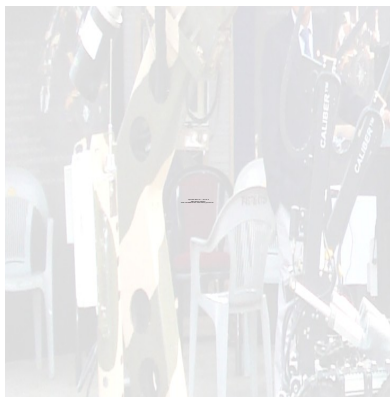
CEO of Omnipresent Robot Technologies, graduate from DCE and CMU Robotics Institute. He has worked for some top robotics companies in US like iRobot Corp, Lockheed Martin, DARPA Robotics Grand Challenge and has over 15 international Robotics Publications

Workshop Robots Exhibited/Taught:

Gatik: InDIA's Humanoid

Angad: Mini UGV

Garun: Mini UAV



Omni UGV Robot Kit



Light Fixed Wing UAV



Vacuumping Robot



Participants would receive:

1. Certificate of Robot Designer Certification signed by DTU and Omnipresent
2. Chance to Participate DTU National Robotics Competition to be conducted early 2012
3. 50% discount on Omnipresent Advanced Ground Robot Development Kit
4. Obtain Reference Letter and a chance to get an internship/job at Omnipresent.
5. Omnipresent would supply some Robotics kits to Engg. Physics Dept. For students
6. Support/Guidance on building robots from Omnipresent for 1 year.
7. Robo Tech T - Shirts/goodies Sponsored by FICCI

Registration:

Send an **email** with your **Name** and **Roll No:** to admin@omnipresenttech.com or SuryanshDSaxena@gmail.com For more information log on to airdtu.blogspot.com, Omnipresenttech.com or teamgatik.com. Workshop Fees : Rs 1700 only (Including Workshop, Practical, Exhibition, Demo and Competition. **Limited Seats , Register Early to ensure your participation. Registration deadline Dec 10th**

