IIIT HYDERABAD

AND

iRC

PRESENTS ...

ROBOCAMP'12

4th -9th June

A B O U T   R O B O C A M P ' 12

Robocamp is a week long workshop focusing on learning and building basic robots from scratch conducted by students of IIIT Hyderabad, in the month of June. Registrations of over 1000 are made every year, and the most enthusiastic 200 are selected. Participation involves students from premier technical institutes such as IITs, deemed universities and local colleges. Guest lectures are delivered by various eminent members from the industry as well as research institutes. Participants are assigned mentors for their convenience and efficient learning, so that they apply their skills to the fullest. The workshop isn't confined to undergraduate students, but also encourages post-graduate and working professionals to be a part of it. Robocamp provides an exciting flavor of theoretical knowledge and its practical implementation with innovation. We aim at empowering and encouraging the buddying potential and ardor of students by providing them a platform where they can learn, visualize, attempt and build smart solutions to common problems. The competitive nature of this workshop ensures the top-notch quality of work done.

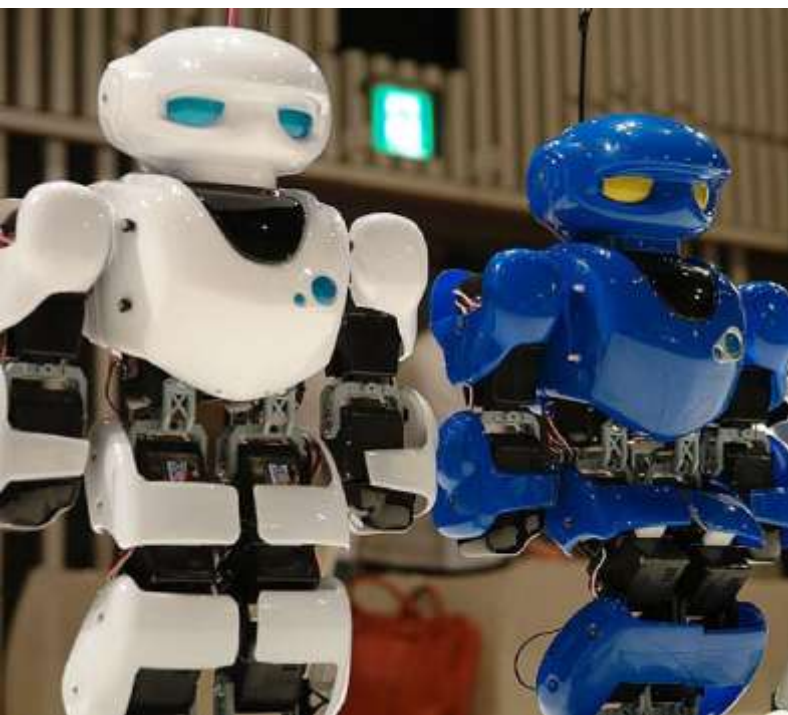WE AT **IIIT-H** BELIEVE IN   TO
HAVE LEARNED AND   IS THE BEST WAY TO PROVIDE
      OUR KNOWLEDGE TO THE ENTHUSIASTIC PARTICIPANTS

HIGHLIGHTS OF

ROBOCAMP

- **Lectures from eminent figures in the field of robotics.**
- **DIYs on robots and microcontrollers.**
- **Showcase of projects done in IIIT-H.**
- **Prizes for brightest participants.**
- **Fun events at the end of every day.**
- **Chance to interact with students from colleges across the country.**

ABOUT IIIT HYDERABAD

- The *International Institute of Information Technology* is a prominent research university founded in 1998.

- Constantly ranked among **top 10 T-Schools** of the country, placed alongside IITs.

- Ranked among **top 5** Engineering colleges of India in terms of **placements.**

- Provides undergraduate and post graduate education of highest quality, with distinguished faculty and a healthy academic environment.

- Over 15 research centres.

- Industry –academia relationship given top-priority.

- Only university with research focus right from UG curricula.

- Selected for IBM shared university award.

- Students have won many international level competitions like *the services innovation challenge, inter-national olympiad in informatics, acm-icpc, interna-tional contest word sense disambiguation, cansat* and many more.

Notes: -

1) **Workshop shall consist learning basics of Digital Logic, Basic Electronic Circuits & Components and C programming basics.**
2) **Students will be encouraged to use Microcontrollers using the Boot loader kit featuring Atmel Atmega16.**
3) **Lab sessions will be conducted during afternoon with adequate mentors for each team.**
4) **Exclusive attention for every individual.**
5) **Special prize for innovative idea (asked during registration).**

MICROCONTROLLERS

A µC is basically a processor that is equipped with memory, input/output ports which are dynamically configurable through simple programming. It is available as an integrated circuit/Chip and requires a dedicated programmer to configure/flash it. We have developed a special board for fast and hands on learning with easy to use USB interfacing with the computer/laptop.

Special features of the boot loader kit (developed at IIIT)

- Works under a variety of Operating Systems with compatible programming and flashingtools available.
- Requires basic editor for writing codes.
- The µC, Atmega16 is a commonly used chip and is supported by tons of tutorials available online.
- There is also an LCD device attachable with the boot loader, for programmer's convenience.

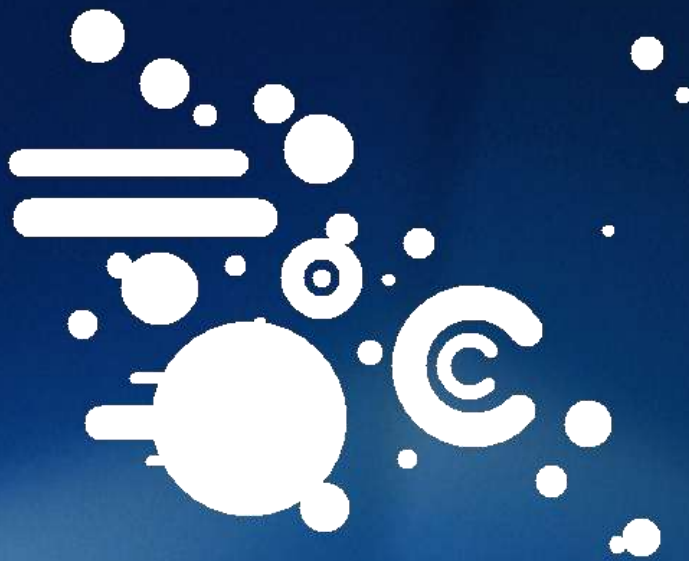## Highlights of DIYs On Robotics:

- Hands on approach to realizing the design based on participant's idea.
- Learning by doing.
- Specialized kits prepared by IIIT students for advanced learning.
- Team work and collabration.
- A mentor for guiding every team.

ROBOCAMP'12

4th-9th June

International Insitutte of Information Technology
Gachibowli, Hyderabad 500032
Andhra Pradesh, India
www.robocamp.iiit.ac.in