

YANTRIK – 2012

A National Convention on Robotics and Mechatronics 16th to 19th
August 2012

Organized by:

The Department of Mechanical Engineering

A Brief Report

Robotics is a ubiquitous topic of the modern era. Robotics will be a part and parcel of our lives few years down the lane.

A national students convention on Robotics and Mechatronics was conducted by KL University in association with “Robotics Core School (RCS)” and Jaypee Group’s “JILIT” from 16th to 19th August 2012.

Inaugural Session:



Inaugural Session was chaired by Vice Chancellor Dr.R.Sreehari Rao, and the Inauguration was done by Prof.G.L.Datta, Chancellor at 09.45am in the Peacock hall on 16th Aug.2012. Dr.S.Guru Prasad was the Chief Guest for the Inaugural Session. Dr.Y.V.Hanumantha Rao HoD was present on the dais, Dr.A.Srinath gave an Introduction on entire four days schedule of events.

To brief the scope of Robotics, we had the following eminent scholars who are experts in the fields of Robotics and Mechatronics who addressed students under Key Note Lectures as per the dates mentioned against their names:

Dr.S.Guru Prasad, R&D Establishment (Engineering) DRDO,Pune, 16.08.2012

Dr.K.Ramesh, Additional Director, CAIR, Bangalore, 17.08.2012

Mr.Sartaj Singh, Scientist E, CAIR, Bangalore, 17.08.2012

Mr.V.C Ravi, Scientist E, CAIR, Bangalore. 18.08.2012

Dr.S.N Shoume Scientist G, CMERI-Durgapur, 18.08.2012

Dr.C.S Kumar Mechanical Dept IIT- Kharagpur, 19.08.2012

Dr.U.Chandrasekhar, Scientist G, GTRE, DRDO-Bangalore, 19.08.2012



Paper and Poster presentation:

85 papers and 28 posters were presented by different students from various colleges and universities across the nation, student participation for the convention peaked up to 1000. Presentations were held in 3 distinct disciplines – Robotics, Artificial intelligence and Embedded systems, Neural Networks etc.



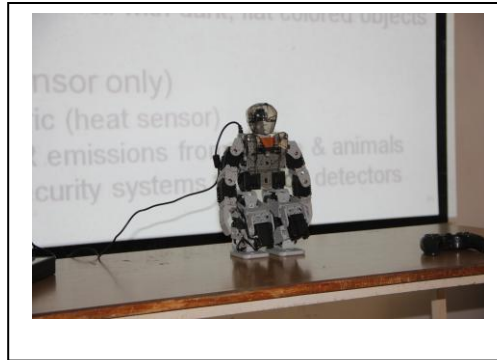
Model contest:

Model contests to YANTRIK, is akin to “A cake with a cherry on its top”. Students from our very own University played a pivotal role and designed “Bots” of various types with around 55 models presented. They were given valuable inputs by Prof A.Srihari Prasad and Dr.A Srinath. Their Efforts were applauded by The Chancellor, KL University, Dr.GL Datta and the winners were suitably rewarded.



Workshops:

“State of the art” workshops were conducted in all the 4 days.



Humanoid workshop: Dealt with introduction , usage and application of humanoid in the near distant future. A workshop of humanoid which is capable of IR sensing , side walking, obstacle detecting ,kicking, dancing, etc.,(first of its kind).

Mobile Robotics: Dealt with wireless technology and simulation of robots with mobile.



Aero Modeling: Briefed the students with basics of aero dynamics and prepared flyable aircraft prototypes.



Android Workshop: Briefed about the usage in present day technology. Android apps were developed by the students at the end of the session.



Image processing: Introduction to mat lab , parallel port communication to construct a Bot which is capable of following ball, demo of night vision, auto navigation on complex



All these workshops supplied kits to have a hands-on experience and practical outlook.

Yantrik in Media:

The Inaugural session was covered by The Hindu, Eenadu & Sakshi.

The Valedictory Session was covered by Eenadu & Sakshi.

However “the icing on the cake” was Publication in the Hindu Education Plus Column with the title “A Date with Robotics at KL University”

Valedictory Session:

The valedictory Session was held in Jasmine Hall on 19th August 2012 from 04.00pm onwards, Prof.G.L.Datta, Chancellor, Dr.R.Sree Hari Rao, Vice

Chancellor, Dr.Y.V.Hanumantha Rao, HoD-Mech.Engg. Dr.A.Srinath, Convener YANTRIK 2012 were Present on dias, along with Dr.U.Chandrasekhar, Scientist G, GTRE-Bangalore- The Chief Guest of Valedictory Session.

The following Prizes were awarded:

Paper Presentation I Prize winners, **Group wise:**

1. Java Ring, **AI Group** Paper Authored by: B.V.Alekhyia Raidu & A.Pallavi of Sri Venkateswara Engg.College, Tirupathi.
2. Virtually Controlled Robots, in **Robotics Group**, Authored by: Ch.Karthik & G.P.S.Srinivas, of K L University.
3. Speech Recognition Using DSP, Under **AGC Group**, Authored by: K.Jayasurya, Sree Kalahasteswara Inst.of Tech, Sri Kalahasthi.
4. Computerized Paper Evaluation Using Neural Networks, **Neural Networks Group**, Authored by: Ch.Tejaswini and G.Sushmitha of Vignan's Laura Inst.of Tech, Guntur.
5. Communications Systems an Integrated Approach, Under **Communication Systems Group**, Authored by: M.D.K.Anush and G.S.L.Mrudu Mouni, Swarnandhra Engg.College.

Poster Presentation:

Wall Walker Robot, Authored by: K.R.Hareesh and S.Dinesh Kumar of Kongu Engg. College Erode.

Model Contest:

I Prize:

Robot Cleaner and detectors for internal surfaces of Pipes: N.Pavan Kishore et.al, K L University.

II Prize:

Agricultural Robot: G.Shyam Sundara Rao et.al, K L University

III Prize:

Humanoid Robot, J.Yashvanth et.al, K L University