

Summary of the workshop:

The in-house software “RoboAnalyzer” developed under the guidance of Prof S. K. Saha at IIT Delhi could act as a tool to understand the physics behind robots. The key features of the software were presented to the faculty members to aid them in effective teaching of courses on Robotics offered to UG/PG students of Mechanical and Electrical Engineering Departments. The area is growing fast in India and there is a large demand for quality engineers. Hence, it is essential that the universities/colleges around the country find a minimum base that must be achieved to make those students ready to work with the subject of Robotics, be in industry or in higher studies. The emphasis was on topics like DH parameters, visualization of homogeneous transformation, forward and inverse kinematics of serial robots, trajectory planning, forward and inverse dynamics of serial robots.

Based on the valuable inputs from the participating faculty members, we would like to make improvements on the software to enhance its effectivity.

Software:

RoboAnalyzer (Developed by IIT Delhi; <http://www.roboanalyzer.com>)

Tutorials can be found on

<http://www.roboanalyzer.com/tutorials.html>

The distal variant of DH parameters used in the presentation is attached in the form of a pdf.

Books:

Saha, S.K., Introduction to Robotics, Tata McGraw-Hill, New Delhi, 2008

Thanks