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Dr. S.K. Saha

Naren Gupta Chair Professor

December 22, 2011

Sub: Introduction of RoboAnalyzer learning software to support the book on "Introduction to Robotics".

Dear Colleague,

It gives me an immense pleasure in informing you that we have developed RoboAnalyzer, a 3D Model Based Robotics Learning Software. In almost about 3500 colleges in India, Robotics as a subject is either taught as a core or an elective subject. It has been observed that most of them go through the descriptive part of a robotics course, for example, what is a robot, application of robots, types of robots, architectures or robots, sensors, actuators, etc. However, the important aspects of robotics like kinematic analysis, dynamics, control, etc. are missed out which are required even to maintain a robot in shop floors of an industry to do programming of a new application, or design/develop new robots. The reasons for missing out the above important topics can be attributed to the difficulties involved in those topics and non-availability of skilled teachers in many of these colleges. This makes students and many teachers stay away from those topics even though there are good books available in India even by Indian authors e.g., "Introduction to Robotics" by S. K. Saha published by Tata McGraw-Hill. Hence, there was a motivation to come up with RoboAnalyzer software at IIT Delhi, which can demonstrate the physics of a robot almost in a setup like video games. That way, one does not have to understand the intricacies of the mathematics of robotics but at the same time will be able grasp its implications.

RoboAnalyzer can be downloaded from <http://www.roboanalyzer.com> and be used for free by faculty to teach in their classes and students to understand the robotics concepts by visualizing the 3D robot models available in the software. It also acts as a supporting material for the robotics topics covered in the text book mentioned above. I request you to kindly put up the enclosed posters of RoboAnalyzer at strategic places in your institute/department to let your faculty and students of Robotics know about it. I also request you to kindly circulate the information to the faculty who teach the course on Robotics. The feedback form enclosed can be distributed amongst the users. All those who send their feedbacks shall be sincerely acknowledged on our website. Additionally, we shall invite them to our future workshops related to robotics. The next workshop is tentatively planned in the 3rd week of April 2012.

I do hope that the software will be helpful to you. Any feedback/comment will certainly help us to improve the software and make it a competitive one in the world market of robotics education.

Thanking You,

Yours Sincerely,

Prof. S. K. Saha

Enclosures:

- 1) RoboAnalyzer Posters (two)
- 2) RoboAnalyzer "Getting Started Manual" (two)
- 3) Feedback form (two)