

School Robot Competition

Robot is a computer controlled machine, which is capable of performing advance tasks, sometimes substituting humans in various activities. Robotics is the science and engineering of using robots, and is a rapidly developing field. Today, robots are used in manufacturing, medicine, space exploration, ocean exploration and even in household activities. Therefore, in the future, the world will be more populated by robots, and they will be indispensable intelligent workers and servants for humans.

Therefore, it is very important for our students to be aware of this fascinating field. In this view, National Science Foundation (NSF), in collaboration with the University of Moratuwa is organizing a school robot competition in order to enhance the knowledge and the curiosity amongst the school children.

The competition has the following three stages

Stage 1: Question paper

A question paper on robotics along with an introduction will be distributed to all NSF registered school science societies (see the attached question paper). A school science society can nominate a team of 5 students to answer the question paper and return it to the NSF before **22 February 2008** to the following address

Director
National Science Foundation
47/5 Maitland Place
Colombo 07

The top scored 10 teams will be selected to go for the next stage. We expect the school societies to select students who are more knowledgeable in electronics and robotics. Students can refer books and the Internet to find answers to the questions.

Stage 2 – One day workshop

Selected 10 student groups (5 from each school totaling 50 students) will undergo a one day training workshop at the Robotics Laboratory at the University of Moratuwa. In this workshop, they will learn about robot sensors, motors, programming robot brain, and mechanical design of mobile robots. Each participating team will be given a robot design kit after the workshop.

Stage 3 – The competition

Each of the 10 teams will design and build a robot at their school physics laboratories. Finally they will come to the University of Moratuwa, where their robots will be put on a competition. The champion and the runner up teams will be award at the World Science Day School Programme in November 2008.