

CWSF 2007 - Truro, Nova Scotia



Techniques for Measuring Robotic Movement

Division: Health Sciences / Automotive

Category: Junior

Region:

City: ,

School:

Abstract: Everyone has seen robots like Canadarm move, but how do robots know when and where to stop? This project investigates how computer hardware and software can be used to measure, and control, robotic movement. It uses the Lego Mindstorms NXT Robotics Development kit to conduct rotational measurement tests on the following home-made rotational sensors: 1. Optical encoder 2. Magnetic Pulse Counter 3. Precision Potentiometer

Awards	Value
The University of Western Ontario Scholarship Bronze Medallist - \$1000 Entrance Scholarship Sponsor: University of Western Ontario	\$1 000
Honourable Mention - Engineering - Junior Sponsor: Youth Science Foundation Canada	\$100
Bronze Medal - Automotive - Junior Sponsor: AUTO21	\$300
Total	\$1 400