David Irwin, Ilia Choly

ACE (Autonomous Cooperative Exploration)

Division: Life Sciences
Category: Senior
Region: Niagara
City: St. Catharines, ON, St. Catharines , ON
School: Sir Winston Churchill, Holy Cross S.S.

Abstract: The ideal application of robotics is the exploration of environments too dangerous for human involvement. Two autonomous robots were built and programmed to work together to search and map an area. Controlled by a master computer, the robots used a variety of sensors to provide the master computer with information to make decisions on the exploration of the environment the robots are in.

Biographies

David - David Irwin is in grade twelve at Sir Winston Churchill Secondary School in St. Catharines, Ontario. His main time commitment is to the VEX robotics team at the school. David is one of the lead designers and builder for the senior robot on the team. This year the robot his team designed and built placed third of approximately 400 in the world championships, winning the division of 100 other robots. Next year David plans on attending the University of Waterloo for Mechatronics Engineering.

Ilia - Ilia Choly is in grade 12 at Holy Cross Catholic High School located in St. Catharines, Ontario. He is involved in his school's robotics team. This is the first year Holy Cross had a team at the school and the team managed to make it to the VEX worldwide robotics competition. Ilia's main interest is programming and he knows over 10 programming languages where his main focus is on network security. Ilia also enjoys playing the guitar, model rocketry, skateboarding, tinkering with electronics, paintballing and some auto repair. For post secondary education Ilia hopes to attend either Waterloo or McMaster for software engineering.

Awards	Value
The University of Western Ontario Scholarship Bronze Medallist - $1000 Entrance Scholarship Sponsor: University of Western Ontario	$1 000
University of Ottawa Entrance Scholarship Senior Bronze Medallist - $1000 Entrance Scholarship Sponsor: University of Ottawa	$1 000
Bronze Medal - Engineering - Senior Sponsor: Youth Science Canada	$300
Total	$2 300