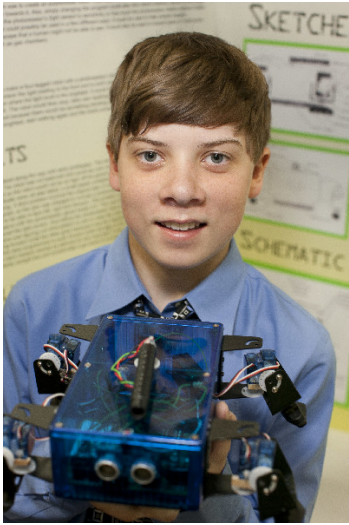


CWSF 2011 - Toronto, Ontario



Shane Hickman

Light Seeking Robot Innovation

Challenge: Innovation

Category: Junior

Region: Niagara

City: Fenwick, ON

School: Pelham Centre

Abstract: The innovation was an autonomous four legged robot that used a photo resistor to take multiple light readings, moved around obstacles perceived using an ultrasonic sensor and walked in the direction where the light readings were brightest. Problems addressed included materials used, movement of legs and positioning of sensors. Overall, results were fairly successful, and suggestions were made to improve future innovations of this type.

Biography

Shane is a grade 7 student at Pelham Centre School in Fenwick. His favourite subjects are Science, Math and Phys.Ed. He plays the flute in the Niagara Senior Elementary Band and also in a 13 member flute choir. In the winter he enjoys playing organized hockey. Shane plays defense and this year was the captain of his peewee team. His hobbies include designing and building robots, building air rifles using plumbing parts, biking, and making animations and movies with friends. This is the first year Shane has participated in a science fair and he has found the entire experience very rewarding. At the Niagara Regional Science Fair, he received the Junior Gold Medal and the James Draper Memorial Award. Shane hopes to study robotic engineering at university.