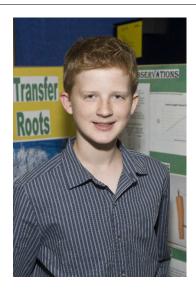




CWSF 2010 - Peterborough, Ontario



Nicholas Johnston

Testing Data Transfer over Plant Roots

Division: Engineering & Computing Sciences

Category: Intermediate
Region: South Fraser
City: Surrey, BC

School: Semiahmoo Secondary

Abstract: This experiment investigates the transmission of data through dandelion,

yellow turnip and carrot roots. Data was observed to transit each specimen type at rates as high as 115,200 bits per second for a limited distance, where the data transmission abruptly stopped. In carrots, transmission distance was found to be positively correlated to carrot diameter.

Biography

Nick Johnston is a grade 9 student at Semiahmoo Secondary School in Surrey, British Columbia, where he maintains a 90 and above average. His main scholastic interests are in the areas of computer science, engineering, physics and programming. Nick one day aspires to be a computer engineer. Outside of school Nick enjoys swimming, ice hockey, mountain biking, running, and is working towards his black belt in Mixed Martial Arts. Being very interested in travel, Nick will participate in a French exchange program this summer in the south of France. He has hopes of one day visiting all seven continents.

Awards	Value
The University of Western Ontario Scholarship	\$1 000
Bronze Medallist - \$1000 Entrance Scholarship	
Sponsor: University of Western Ontario	
Bronze Medal - Computing & Information Technology - Intermediate	\$300
Sponsor: Intel of Canada, Ltd.	
Total	\$1 300



