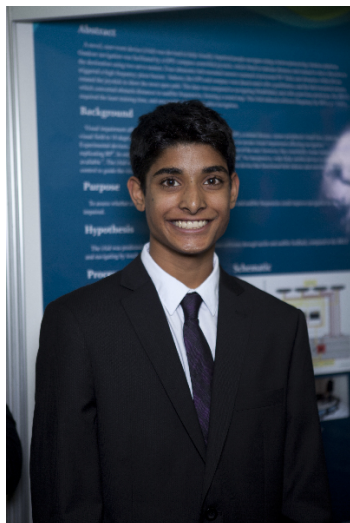


CWSF 2013 - Lethbridge, Alberta



Alexander Deans

iAid: A Novel Navigation Device for the Visually Impaired

Challenge: Innovation

Category: Intermediate

Region: Windsor

City: Windsor, ON

School: Academie Ste. Cecile International

Abstract: A novel navigation device for the visually impaired was developed using multimodal feedback. A joystick rotated to show direction, tilted to show distance to the destination, and alerted users to obstacles within 60 cm. 10 volunteers, 1 retinitis pigmentosa patient, and 11 other visually impaired people were tested measuring course completion time and number of collisions. The iAid was the fastest and safest device.

Biography

My name is Alexander Deans, and I am in Grade 10 at Academie Ste. Cecile International School, Windsor, ON. I love playing many sports, including soccer, hockey, tennis, volleyball, sailing, and skiing. I also play the acoustic guitar and piano. I enjoy working with animals, and I have a bearded dragon.

Awards

Value

S.M. Blair Family Foundation Award - Intermediate Sponsor: S.M. Blair Family Foundation	\$750
Challenge Award - Innovation - Intermediate Sponsor: BlackBerry	\$750
Excellence Award - Intermediate - Gold Medal Sponsor: Youth Science Canada	\$700
Western University Scholarship Gold Medallist - \$4000 Entrance Scholarship Sponsor: Western University	\$4 000
Platinum Award - Best Intermediate Project Sponsor: BlackBerry	\$5 000
Total	\$11 200