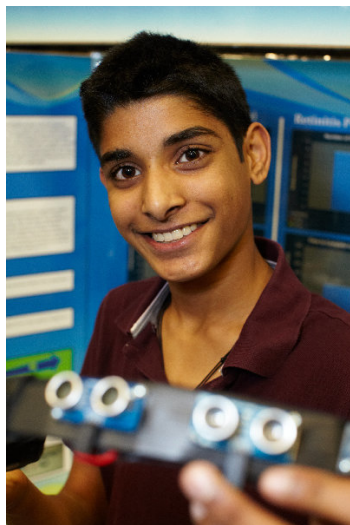


CWSF 2012 - Charlottetown, Prince Edward Island



Alexander Deans

iBELT: Training the Ear to See!

Challenge: Innovation

Category: Intermediate

Region: Windsor

City: Windsor, ON

School: Academie Ste. Cecile International

Abstract: An inexpensive novel, user-carried device (iBELT) was created to map the visually impaired user's environment using four ultrasonic sensors. Distances to obstacles were converted to audible frequencies, forming a "sound map". Twenty volunteers and a retinitis pigmentosa patient were tested on an obstacle course while navigating blindly, with one sensor, and the iBELT. The iBELT improves safety and speed, and is the most efficient device.

Biography

My name is Alexander Deans, and I am in Grade 9 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. I recently competed in the International Children's Games in Kelowna, B.C., against youth from over 14 countries around the world!

Awards

Value

Excellence Award - Intermediate - Silver Medal Sponsor: Youth Science Canada	\$700
Western University Scholarship Silver Medallist - \$2000 Entrance Scholarship Sponsor: Western University	\$2 000
Total	\$2 700