

CWSF 2016 - Montreal, Quebec



Masum Billah, Calvin Veenkamp

Walking Analysis: A Gait-Way to a Better Future

Challenge: Innovation

Category: Senior

Region: Toronto

City: Toronto, ON

School: Danforth Collegiate & Technical Inst.

Abstract: Gait Tracker is a economical and versatile device designed to measure the motion of a person's limbs. It can be used by both professionals and consumers for a wide variety of applications including: research studies on human gait, monitoring rehabilitation programs, identifying harmful walking patterns, and improving sports performance.

Biographies

Masum - My name is Masum Billah, I am a grade 11 student in the MaST program (Math and Science Technology) at Danforth Collegiate & Technical Institute in Toronto, Ontario. I am also an aspiring programmer/innovator, and my passion for programming and technology inspired me and my partner to create a motion detecting device for the science fair. The device was originally designed for use in prosthetics, but upgrades have increased it to many other uses in the field of sports, rehabilitation, and gait-correction. In the future, we plan on creating a smartphone app, allowing us to market it since it will become a lot smaller (approximately the size of a...

Calvin - My name is Calvin Veenkamp, I am currently a grade 11 student in the MaST (Math Science and Technology) program at Danforth Collegiate and Technical Institute in Toronto, Ontario. Being the Vice President of my local Venturer Scout group, I love meeting new people and helping them out with whatever they need. This is what inspired me and my partner to develop a motion detecting device for the science fair. The hopes in creating this device was to be able help those recovering from surgery with their rehabilitation in addition to personal use at home to help people correct their walk and prevent future injuries. In the future we hope to be abl...

Awards

Value

Excellence Award - Senior - Bronze Medal Sponsor: Youth Science Canada	
University of Ottawa Entrance Scholarship Senior Bronze Medallist - \$1000 Entrance Scholarship Sponsor: University of Ottawa	\$1 000
Western University Scholarship Bronze Medallist - \$1000 Entrance Scholarship Sponsor: Western University	\$1 000
Total	\$2 000