

# CWSF 2016 - Montreal, Quebec



## John Fish

### A Novel Method in Tree Biomass Calculation

**Challenge:** Innovation

**Category:** Senior

**Region:** Waterloo-Wellington

**City:** Waterloo, ON

**School:** Laurel Heights S.S.

**Abstract:** Monitoring tree growth is crucial in the understanding of plant diseases and carbon dioxide regulation. Through a novel method in computer vision research, samples of huge numbers of trees can be monitored in a timely manner with a high degree of accuracy.

#### Biography

My name is John Fish, and I'm a 16-year-old student in grade 11 from Waterloo, Ontario. I'm hugely passionate about a lot of things, but primarily I'm passionate about science, programming, running, and trees. Right now I'm the #1 ranked U18 runner nationally in both the 800m and the 1500m distances. I have released a number of apps with commercial success on both the Google Play store and Blackberry World, with iOS apps coming soon. This is my second CWSF, my first being last year where I attended for my project GPS Footprint. I'm a huge environmental advocate, and my previous projects have shown that: GPS Footprint, Timber (an award winning hackathon social network that was based on meeting people at trees), and now my current project which looks at measuring the biomass of trees using computer vision. At my Regional Fair, I won Best in Division for Engineering, as well as a variety of scholarships to local universities.

#### Awards

#### Value

Excellence Award - Senior - Silver Medal Sponsor: Youth Science Canada	
Dalhousie University Faculty of Science Entrance Scholarship Senior Silver Medallist - \$2500 Entrance Scholarship Sponsor: Dalhousie University, Faculty of Science	\$2 500
UBC Science (Vancouver) Entrance Award Senior Silver Medallist - \$2000 Entrance Scholarship Sponsor: The University of British Columbia (Vancouver)	\$2 000
University of Ottawa Entrance Scholarship Senior Silver Medallist - \$2000 Entrance Scholarship Sponsor: University of Ottawa	\$2 000
Western University Scholarship Silver Medallist - \$2000 Entrance Scholarship Sponsor: Western University	\$2 000
<b>Total</b>	<b>\$8 500</b>