

# CWSF 2018 - Ottawa, Ontario



## Elias Andersen

### ChampTrax: A Novel Approach to Sports Analytics

**Challenge:** Innovation

**Category:** Senior

**Region:** Simcoe County

**City:** Meaford, ON

**School:** Pretty River Academy

**Abstract:** A state-of-the-art player tracking system was developed to evaluate athletes using Bluetooth and Radio Frequency technology. Using triangulation, athletes were tracked utilizing a proprietary tag-anchor system specifically designed to generate reports on all players. The system covers all sports in real-time. It offers an affordable and innovative solution for developing sports analytics and injury prevention measures, for teams at all levels.

#### Biography

My name is Elias Andersen and I am a grade twelve student at Pretty River Academy in Collingwood, Ontario. I am a three-time CWSF medalist and I won 4th place at the Intel ISEF last year with my electronic baseball umpire. Science and math are my favourite subjects at school. In my spare time, I enjoy using my social media skills to help non-profit sports organizations. I love playing and watching all sports, which led to this year's innovation, "ChampTrax: A Novel Approach to Sports Analytics". In a few short months, I plan on attending university and studying engineering.

#### Awards

#### Value

Excellence Award - Senior - Bronze Medal Sponsor: Youth Science Canada	
Carleton University Entrance Award Senior Bronze Medallist - \$1,000 Entrance Award Sponsor: Carleton University	\$1 000
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
<b>Total</b>	<b>\$3 000</b>