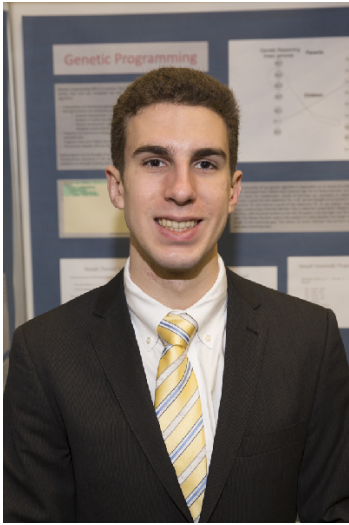


CWSF 2016 - Montreal, Quebec



Craig Fiedorek

Automated Theorem Proving

Challenge: Innovation

Category: Senior

Region: Calgary Youth

City: Calgary, AB

School: Webber Academy

Abstract: This project presents foundational concepts of automated theorem proving, current roadblocks to related research, and a novel technique for proof-search that utilizes a genetic programming algorithm within a formal proof management system. Primary applications are in the formalization of mathematics and in software verification.

Biography

I am a grade 12 student living in Calgary, Alberta, and am highly interested in artificial intelligence and the use of computers to automate creative processes. I will be attending Duke University this fall. I encourage potential science fair participants to a) combine different fields that they are passionate about and b) think radically about how the world could be different.