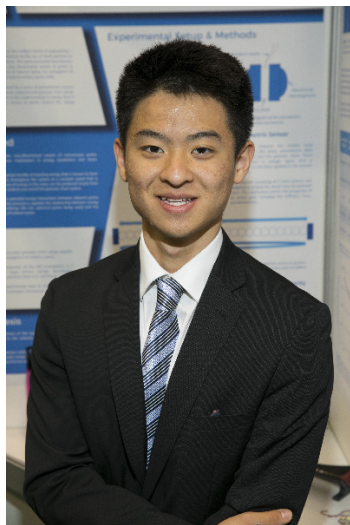


CWSF 2017 - Regina, Saskatchewan



Bob Wei

Solitary Wave Propagation in a Novel Granular Chain Setup

Challenge: Innovation

Category: Senior

Region: Niagara

City: Caledon, ON

School: Sir Winston Churchill

Abstract: Granular materials are ubiquitous in the modern world of engineering?from the gravel used in civil construction to the small particles used in shock absorption. The work presented here focuses on the mechanical energy transformations in a one-dimensional system known as the granular chain. Specifically, a novel apparatus was developed for the study, providing an experimental emphasis in a field that is predominantly theoretical and simulation-based.

Biography

My name is Bob Wei and I am a grade 12 student at Sir Winston Churchill Secondary School in St. Catharines, Ontario. Growing up, I have always been interested in the mathematics and sciences and this has culminated in my future career path in computer science. Outside of school, I am a competitive rower and I am also involved in the community through volunteering and student politics. Next year, I will be studying software engineering at the University of Waterloo.

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