

# CWSF 2019 - Fredericton, New Brunswick



## Tavian Augustus

### Solar Step: Combining Solar Panels and Piezo Cells to Create Clean Electricity

**Challenge:** Energy

**Category:** Junior

**Region:** Bay Area

**City:** Dundas, ON

**School:** St. Augustine E.S.

**Abstract:** "The Solar Step" combines solar panels with piezoelectric cells in one circuit in order to generate clean and renewable electricity. By combining kinetic energy and solar power, this innovation will generate electricity when placed in high pedestrian and vehicle traffic areas. This will reduce the amount of carbon produced every year, assisting in our battle against climate change.

#### Biography

My name is Tavian and I am a grade 7 student at St. Augustine Catholic Elementary School. Some activities that I enjoy are competitive swimming, reading graphic novels, playing video games and biking in the summer. Some hobbies of mine are building lego sets (Saturn V is my favourite with 1969 pieces), collecting coins and stamps and learning about planes, trains, and automobiles. I got my inspiration for my project from two companies. One is called Solar Roadways that makes well, solar roadways. The other company is called Pavegen Tiles. They make tiles that generate electricity when stepped on. In the future I would like to investigate archaeology because I like learning about what life was like for our predecessors by finding artifacts. I also am interested in biology especially animals that are endangered or at risk because of pollution or habitat destruction. If someone was thinking of doing a project, I would tell them to have fun making their project and whether they move on or not they still did an amazing job and deserve to be proud.

#### Awards

#### Value

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