

# CWSF 2018 - Ottawa, Ontario

## Hailin Wang

### Affordable Mechatronics Solution for Independent Movement Assistance

**Challenge:** Innovation

**Category:** Senior

**Region:** Niagara

**City:** St. Catharines, ON

**School:** Sir Winston Churchill

**Abstract:** An innovative mobility assistance device to aid with improving the quality of life for Canada's rapidly increasing elderly population. Provides users with unique capability of both movement and the ability to perform a wide range of daily tasks required to live freely and independently.

#### Biography

Since grade nine, Hailin has been a member of the various technology/engineering clubs at Sir Winston. He has attained distinctions at various levels of competitions including: regional skills Mechanical CAD gold medalist and scholarship winner at McMaster science and engineering fair. For four years he dedicated his time to the Sir Winston and St.Catharines rowing clubs and rowed at international level regattas and earned the title of national high school rowing champion. During the summer of 2017 he was accepted in the SHAD program, an enrichment program to develop STEM, leadership and business skills which he has since applied to qualify for the provincial DECA competition. Hailin has also been recognized for his volunteer work with the regional conservation agency for his exceptional environmental preservation efforts. When deciding on a project, Hailin wanted to create a solution that impacted the lives of people around him. Seeing his grandparents and piano teachers struggling with living independently, he decided to create a project that incorporated his passions for engineering and desire to improve the quality of life for others. He plans to continue developing his mobility aid to make it more accessible and feasible as a marketable product.

#### Awards

#### Value

|   |         |
|---|---------|
| Excellence Award - Senior - Bronze Medal<br>Sponsor: Youth Science Canada   |         |
| Carleton University Entrance Award<br>Senior Bronze Medallist - \$1,000 Entrance Award<br>Sponsor: Carleton University              | \$1 000 |
| University of Ottawa Entrance Scholarship<br>Senior Bronze Medallist - \$1000 Entrance Scholarship<br>Sponsor: University of Ottawa | \$1 000 |
| Western University Scholarship<br>Bronze Medallist - \$1000 Entrance Scholarship<br>Sponsor: Western University                     | \$1 000 |
| Total   | \$3 000 |