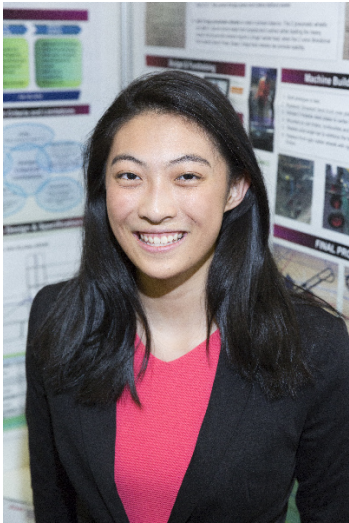


CWSF 2018 - Ottawa, Ontario



Claire Du

Carpet Lifting Machine Innovation

Challenge: Innovation

Category: Intermediate

Region: Calgary Youth

City: Calgary, AB

School: Western Canada Senior High School

Abstract: The purpose of this innovation is to reduce labor requirement for lifting and moving big heavy gym carpets. In this project, an innovative machine was designed, manufactured and tested. The machine cuts labor to 1 person, the constant strength requirement on back and hips is reduced and maneuvering and turning are effortless. Physics and several technologies were applied. This machine has human and commercial benefit.

Biography

My name is Claire Du. I am a grade 10 student in Calgary, Alberta. At school, I founded an AI Club to connect teens to university professionals and industry leaders in the artificial intelligence field. I also volunteer for the NeuroArm Project, a medical lab in Foothills Hospital, to help innovate computer-assisted devices specifically designed for neurosurgery. I mentored a rookie community FLL team for 2 years to teach programming. I am the captain and chief programmer of an FTC team which won Western Regional Championship Alliance Awards for 2 years. Through years of involvement in STEM activities, I believe that hands-on learning to solve real-world problems can shape innovators of our future. I applied this belief to innovate a carpet lifting machine to solve a labor problem for my gymnastics club. This innovation reduces labor and makes lifting and moving big heavy gym carpets easier. From this science fair project, I have learned that applying simple and basic science and technology to make life more prosperous and convenient is meaningful. I encourage potential science fair participants to link their passion with the local community and think radically about how an innovation project could make help the world.

Youth Science Canada
PO Box 297
Pickering ON L1V 2R4
www.youthscience.ca / info@youthscience.ca
416-341-0040