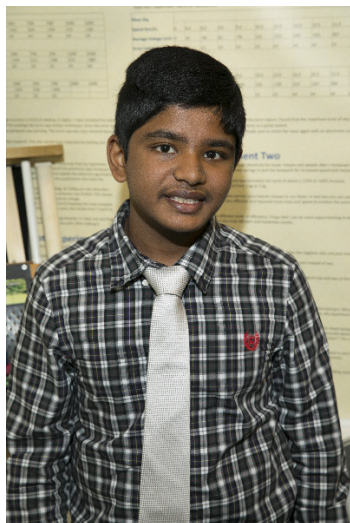


# CWSF 2017 - Regina, Saskatchewan



## Tharindu Kottegoda

### Energy Harnessing Backpack

**Challenge:** Energy

**Category:** Junior

**Region:** St. James-Assiniboia

**City:** Winnipeg, MB

**School:** Bruce Middle School

**Abstract:** What if you could make electricity while you walk? With an "Energy Harnessing Backpack" you can. This backpack is designed to turn kinetic energy from your movements into electricity. I experimented on increasing mass or speed of my movements would increase the electricity produced, and observed that electricity generation is significantly improved. I hope my research will help to develop backpack designs and technology.

#### Biography

Hello, my name is Tharindu Kottegoda. I am a grade 8 student from Bruce Middle School, Winnipeg, Manitoba. My favourite subjects are Math and Science, and have earned several academic awards in these areas. I came first in Manitoba from Canadian Math Kangaroo Contest. I play clarinet and alto saxophone in the school band program and sing in the school and divisional choir. I enjoy volunteering to play piano at a senior home in Winnipeg. I am a junior black belt in Karate and I am also doing lifesaving courses in swimming. My whole family loves camping, hiking, biking, and to explore nature. I always thought that it would be nice if there was a way to generate electricity when you are in remote locations. It would have to be something portable, efficient and quick at producing electricity and independent of nature like wind or sun. This energy harnessing backpack exactly matched my ideas, and I am looking forward to do more experiments in summer. My advice to future science fair participants is to do a project that you are really passionate about, start early and to record every detail that relates to your research.

#### 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