Eve Gilbert

Independence Plus: A Mobility Aid

Challenge: Innovation
Category: Junior
Region: Simcoe County
City: Collingwood, ON
School: Mountain View P.S.

Abstract: A door switch was created using a Raspberry Pi and a Adafruit development board. A program was developed so that people with impaired mobility could passively open and close any door using a device. This was tested with a model door, using the program Terminal, (language of Python), and the programming software Arduino.This device will encourage and increase the independence for people with physical impairments.

Biography
My name is Eve Gilbert and I am a grade 8 student attending Mountain View E.S in Collingwood, Ontario. This is my second year attending the Canada-Wide Science Fair and I am really excited! I enjoy sailing, curling, singing and theatre. In my spare time I volunteer with wheelchair curling where I assist people with physical impairments, which inspired my latest project 'Independence Plus'. I created a device that would encourage and increase the independence for people with impaired mobility. The next step is to try and make my innovation marketable. My advice for others would be to try and find real life problems and solve them! I am so excited and thankful for the opportunity to be attending CWSF again!

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