

CWSF 2016 - Montreal, Quebec



Joseph Saturnino

Wearable Sonar Technology

Challenge: Innovation

Category: Junior

Region: Bay Area

City: Hamilton, ON

School: St. Margaret Mary E.S.

Abstract: Using sonar technology I created a wearable aid for the visually impaired. The belt uses a microcontroller to calculate the distance from an object. This distance is then categorized according to one of my 5 preset ranges and plays a unique sound for each range. Overall my device functioned the way I wanted it to. However, I determined that there is still room for improvement.

Biography

Joseph Saturnino is a grade 7 student from St. Margaret Mary School in Hamilton, Ontario. He is a well rounded student who enjoys playing the piano, chess, creating and editing videos, travelling with his family and hanging out with his friends. He plays competitive football where he has won three consecutive defensive MVP Awards. In past academic achievements, Joseph has received three HWCDSB Director's Awards in Science and Technology and Overall Academic Excellence. He has participated in System Science Fairs since grade four and has achieved gold medals in each year. At the 2016 Bay Area Science and Engineering Fair, Joseph was honoured to receive a Gold Merit and was the recipient of the Roy Middleton Award for Best Junior Project. Joseph's inspiration stems from his curious nature and his love of science; he truly enjoys creating things that can help people. Joseph's future investigation will be focused on enhancing the product to make it a commercially viable device which can be patented and sold. For any other students considering doing a science fair project, here is his advice; be organized, never give up, ask a lot of questions, challenge a lot of answers, and most importantly have FUN!

Awards

Value

Excellence Award - Junior - Silver Medal Sponsor: Youth Science Canada	
Western University Scholarship Silver Medallist - \$2000 Entrance Scholarship Sponsor: Western University	\$2 000
Total	\$2 000