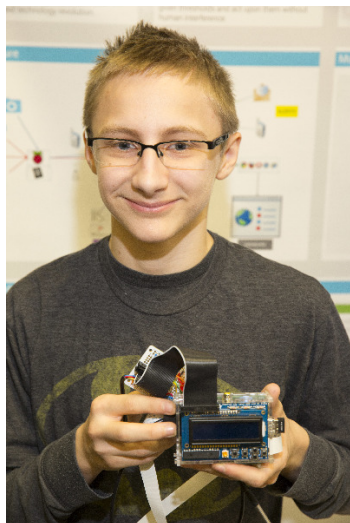


CWSF 2014 - Windsor, Ontario



Aaron Howe

MonitorMe - The Internet of Living Things

Challenge: Innovation

Category: Intermediate

Region: Canadian Rockies

City: Canmore, AB

School: Banff Community High School

Abstract: My project extends the concept of the Internet of Things to include monitoring of individuals. The monitoring could be useful in a wide variety of applications including medical safety, athletic development, personal safety and interest. My prototype device allows for monitoring of biological and environmental data with real-time transmission of the Internet for remote storage, monitoring, analysis and automated alerts.

Biography

I am a Grade 9 student attending Banff Community High School in Alberta. I am greatly interested in innovation and integrating technology into our lives. I have taken part in several regional Science Fairs and have previously entered projects using robotics, chemistry and computer testing, achieving first place in my category on each occasion. I have also entered the 2013 CWSF in Lethbridge, Alberta where I received a bronze medal. I came up with this project when my Dad and I were discussing ways to use a new credit card sized computer called a Raspberry Pi. I wanted to see if this computer could be used as the basis for a S.M.A.R.T device with only a few simple components and some Python programming. Attached sensors would then record real-time data and send it over the Internet for remote monitoring, analysis and automated alerting. My advice to other students is to find something original, useful and convenient; the simplest ideas are often the best. Presenting is also a very important part of project, so make sure to practice to give people a better understanding of your project.

Awards

Value

Excellence Award - Intermediate - Bronze Medal Sponsor: Nuclear Waste Management Organization	\$100
Western University Scholarship Bronze Medallist - \$1000 Entrance Scholarship Sponsor: Western University	\$1 000
Total	\$1 100