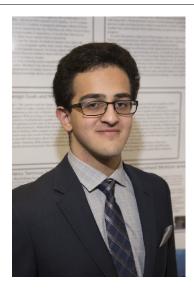




## CWSF 2016 - Montreal, Quebec



## **Ahmed Lone**

## **Novel Camera-Based WSN in Fire Detection**

Challenge: Innovation Category: Senior

Youth Science Canada

Pickering ON L1V 2R4

PO Box 297

416-341-0040

Region: Calgary Youth City: Calgary, AB School: Webber Academy

Abstract: A novel method of fire detection utilizing a camera-based Wireless Sensor

Network was developed, in order to create a system capable of

instantaneously distinguishing fire over vast areas. The image processing algorithms featured color, motion and flickering recognition, and were able

to detect 100% of all fires they were presented with.

## **Biography**

Hey! My name is Ahmed Lone, and I am a grade 11 student attending Webber Academy in Calgary Alberta. I moved here a couple years ago, in grade 9, and steadily got more involved in science fair since. I love math, physics, and programming, and tried to involved the three in my project as much as I could. I'm also involved in debate, model united nations, speech, and robotics and have competed regionally and provincially in all four. This will be my first time attending CWSF, and I'm excited to finally participate! I hope to either continue the development of this project, foray into the world of machine learning, or do both in the future. My only advice to students thinking about doing a project is to never be intimidated by how hard a project may seem, you'll be surprised by how much one can learn. I started this year a neanderthal, and I am now a neanderthal who knows linear algebra. I look forward to meeting all my peers at Montreal!

Awards	Value
The Actuarial Foundation of Canada Award - Senior	\$1 000
Sponsor: The Actuarial Foundation of Canada	
The Manning Innovation Achievement Award - Senior	\$500
Sponsor: Ernest C. Manning Awards Foundation	
Excellence Award - Senior - Silver Medal	
Sponsor: Youth Science Canada	
Dalhousie University Faculty of Science Entrance Scholarship	\$2 500
Senior Silver Medallist - \$2500 Entrance Scholarship	
Sponsor: Dalhousie University, Faculty of Science	
UBC Science (Vancouver) Entrance Award	\$2 000
Senior Silver Medallist - \$2000 Entrance Scholarship	
Sponsor: The University of British Columbia (Vancouver)	
University of Ottawa Entrance Scholarship	\$2 000
Senior Silver Medallist - \$2000 Entrance Scholarship	
Sponsor: University of Ottawa	
Western University Scholarship	\$2 000
Silver Medallist - \$2000 Entrance Scholarship	
Sponsor: Western University	
Total	\$10 000



