

# CWSF 2015 - Fredericton, New Brunswick



## Sajeev Kohli

### R.E.D.M.A. - Residential Emergency Detecting Multifunctional Apparatus

**Challenge:** Innovation

**Category:** Junior

**Region:** Waterloo-Wellington

**City:** Waterloo, ON

**School:** Kitchener Waterloo Bilingual School

**Abstract:** R.E.D.M.A is an innovative system that allows homeowners to monitor the environmental conditions of their property in real-time via a Smartphone from any remote location. The system also transmits e-mail alerts in the event of a basement flood or fire. The prototype implementation of the system has a demonstrated accuracy in excess of 99%.

### Biography

My name is Sajeev Kohli and I am an eighth grade student in Waterloo, Ontario. I have developed an innovative system that allows homeowners to monitor the environmental conditions of their property in real-time from remote locations via a smartphone mobile application and website. The system detects water, smoke, and high temperatures and transmits e-mail alerts indicating the possibility of a flood or fire to system users. Outside of science fair, I tutor younger schoolmates in French and mathematics. I have also won multiple regional and provincial speaking competitions and have been ranked in the top 5% of all competitors in the Canada-wide advanced mathematics competitions. I am an avid reader and enjoy playing the piano. I am also passionate about science and aspire to someday become a doctor and improve the quality of life of all my patients.

### Awards

### Value

Canadian Artificial Intelligence Association Award - Junior Sponsor: Canadian Artificial Intelligence Association	\$500
The Dr. Lisa Su Award - Junior Sponsor: Advanced Micro Devices (AMD)	\$500
Excellence Award - Junior - Silver Medal Sponsor: Youth Science Canada	
Western University Scholarship Silver Medallist - \$2000 Entrance Scholarship Sponsor: Western University	\$2 000
<b>Total</b>	<b>\$3 000</b>