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
Total	$3 000