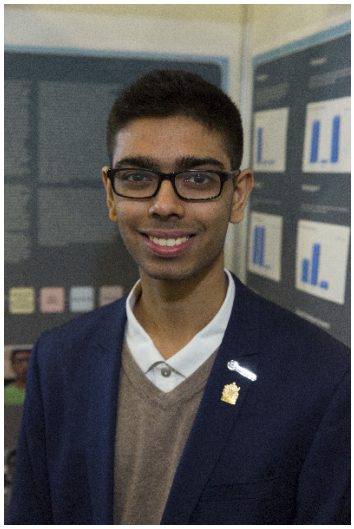
CWSF 2018 - Ottawa, Ontario



Dhruv Patel

HIRO: An Intelligent System for Drowsy Driving Detection

Challenge: Information
Category: Senior
Region: Wood Buffalo
City: Fort McMurray, AB
School: Westwood Community High School
Abstract: I developed a cost efficient drowsiness detection system called HIRO. HIRO uses neural networks to detect the physical closure of the eyes, calculate the frequency of yawning, and capture heart rate. HIRO provides data to the users about their driving and sounds alarms based on drowsiness levels to advise the driver accordingly.

Biography

My name is Dhruv Patel and I am a grade 12 student from Westwood Community High School located in Fort McMurray, Alberta. My biggest hobbies are playing badminton and coding. I recently won the Arctic Winter Games for badminton and took part in many coding ventures within my community. I was the lead designer on my robotics team throughout middle and high school where we went to the FLL Razorback World Championships. I certainly plan on pursuing engineering and technology in my post secondary education.

Awards	Value
Excellence Award - Senior - Bronze Medal Sponsor: Youth Science Canada	
Carleton University Entrance Award Senior Bronze Medallist - $1,000 Entrance Award Sponsor: Carleton University	$1 000
University of Ottawa Entrance Scholarship Senior Bronze Medallist - $1000 Entrance Scholarship Sponsor: University of Ottawa	$1 000
Western University Scholarship Bronze Medallist - $1000 Entrance Scholarship Sponsor: Western University	$1 000
Total	$3 000