Youth Science Canada Sciences jeunesse Canada

## CWSF 2011 - Toronto, Ontario



## Biography

My name is Nirusan Jayaranjan, and I attend Sturgeon Heights Collegiate in Winnipeg, Manitoba. The Canada-Wide Science Fair in Ottawa will be my third one that I will attend. I enjoy playing sports such as soccer, football, volleyball, and basketball. I will be attending Sturgeon Heights Collegiate for high school next year. I enjoy playing my alto saxophone in both concert and jazz band. I have an older brother who also attended the Canada-Wide Science Fair. I also plan on helping out with the 2009 Manitoba Host Committee for when we host the Canada-Wide Science Fair.

## Nirusan Jayaranjan

## Automated Drinking \& Driving Deterrence System

Challenge: Innovation
Category: Senior
Region: St. James-Assiniboia
City: Winnipeg, MB
School: Collège Sturgeon Heights Collegiate
Abstract: My project creates an automated drinking and driving deterrence system using a passive, compact breathalyzer that could be easily installed into a vehicle to detect the driver's blood alcohol level. If the blood alcohol level is sufficient enough to diminish the ability of the driver to operate the vehicle, the vehicle would only operate in a limited capacity in order to prevent impaired driving.

| Awards | Value |
| :--- | ---: |
| Excellence Award - Senior - Silver Medal <br> Sponsor: Youth Science Canada | $\$ 700$ |
| Dalhousie University Faculty of Science Entrance Scholarship <br> Senior Silver Medallist - \$2500 Entrance Scholarship <br> Sponsor: Dalhousie University, Faculty of Science | $\$ 2500$ |
| UBC Science (Vancouver) Entrance Award <br> Senior Silver Medallist - \$2000 Entrance Scholarship <br> Sponsor: The University of British Columbia (Vancouver) | $\$ 2000$ |
| The University of Western Ontario Scholarship <br> Silver Medallist - \$2000 Entrance Scholarship <br> Sponsor: University of Western Ontario | $\$ 2000$ |
| University of Ottawa Entrance Scholarship <br> Senior Silver Medallist - \$2000 Entrance Scholarship <br> Sponsor: University of Ottawa | $\$ 2000$ |
| Total | $\$ 9200$ |

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