

# CWSF 2008 - Ottawa, Ontario



## Evan Woo, Tony Xiao

**Your life or your car? AirCrumble lets you have both.**

**Division:** Earth & Environmental Sciences / Automotive  
**Category:** Senior  
**Region:** Greater Vancouver  
**City:** Vancouver, BC, Burnaby, BC  
**School:** Vancouver College, Burnaby North Secondary  
**Abstract:** During a great number of low speed collisions, vehicles can be severely damaged, resulting in expensive repairs and even total loss. Inspired by the Mars Exploration Rovers, AirCrumble is a system that deploys external airbags in front of vehicle bumper moments before impact. This leads to longer stopping distance, which reduces or even eliminates damage done to the vehicles while further protecting the passengers.

### Biographies

Evan - Evan Woo was born on February 3, 1990 in the small northern town of Vanderhoof, BC and lived in Fraser Lake during his younger years. Science has always intrigued him ever since his elementary years. He passed his elementary years often pondering about nature's workings and reading archives of Popular Science magazines. His educational growth later influenced his family to relocate to the city of Vancouver where he currently resides. Moving from a village of no more than 2000 to the grand city of Vancouver came to him as an absolute shock. Evan is currently attending his grad year at Vancouver College, an all-boys private Catholic school. As ...

Tony - A young scientist and aspiring entrepreneur, Tony is extremely passionate about science, technology, and the implications they have on society. Ever since he was a child, he has had two idols - Einstein and Bill Gates. Until recently he was terribly torn between NASA and Wall Street. However, he managed to resolve this dilemma and channel his passions for both disciplines by striving to use business to promote fruits of science. The honours he has received include gold medals from RBC/Shad Entrepreneurship Cup, Junior Achievement BC Second Place, MusicFest Canada Gold Award, Avogadro National Top 5%, among other academic honours. Tony's intere...

Awards	Value
The Manning Innovation Achievement Award Sponsor: Ernest C. Manning Awards Foundation	\$500
Petro-Canada Peer Innovation Award - Senior - Western Canada Sponsor: Petro-Canada	\$200
Dalhousie University Faculty of Science Entrance Scholarship Senior Gold Medallist - \$4000 Entrance Scholarship Sponsor: Dalhousie University, Faculty of Science	\$4 000
Dalhousie University Faculty of Science Entrance Scholarship Senior Silver Medallist - \$2000 Entrance Scholarship Sponsor: Dalhousie University, Faculty of Science	\$2 000
NSERC Undergraduate Student Research Award - Senior Gold Medallist Sponsor: Natural Sciences and Engineering Research Council of Canada (NSERC)	\$5 625
UBC Science (Vancouver) Entrance Award Senior Silver Medallist - \$2000 Entrance Scholarship Sponsor: The University of British Columbia (Vancouver)	\$2 000
The University of Western Ontario Scholarship Gold Medallist - \$2000 Entrance Scholarship Sponsor: University of Western Ontario	\$2 000
The University of Western Ontario Scholarship Silver Medallist - \$1500 Entrance Scholarship Sponsor: University of Western Ontario	\$1 500
University of Ottawa Entrance Scholarship Senior Gold Medallist - \$20,000 Entrance Scholarship (\$5,000 each year for 4 years) Sponsor: University of Ottawa	\$20 000
University of Ottawa Entrance Scholarship Senior Silver Medallist - \$3000 Entrance Scholarship Sponsor: University of Ottawa	\$3 000
Silver Medal - Computing & Information Technology - Senior Sponsor: Intel of Canada, Ltd.	\$700
Gold Medal - Automotive - Senior Sponsor: AUTO21	\$1 500
<b>Total</b>	<b>\$43 025</b>