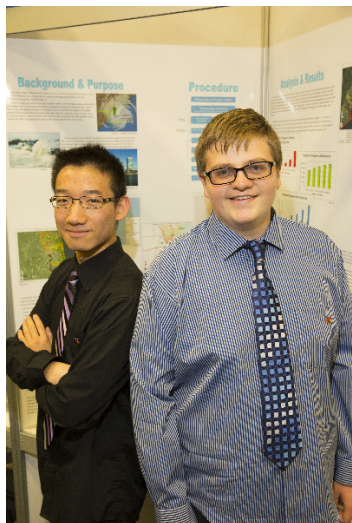


## CWSF 2014 - Windsor, Ontario



### Kevin Strauss, Kevin Dong

#### The Calculated Crisis

**Challenge:** Environment

**Category:** Senior

**Region:** Waterloo-Wellington

**City:** Waterloo, ON

**School:** Waterloo Collegiate Institute

**Abstract:** Every year, hurricanes along the East Coast create storm surges which devastate cities. To help these cities, a method was devised using physics and ArcGIS, a mapping and data manipulation program, to estimate the extent and damage caused by hypothetical storm surges. With Jacksonville, FL, as the city of study, the method was used to calculate the surge extent to an accuracy of 81%.

#### Biographies

Kevin - Kevin Strauss is a 16 year old, grade 11 student currently attending Waterloo Collegiate Institute. He enjoys a variety of interests including travel, football, hockey, piano and rock collecting. Kevin has travelled throughout Canada, and the love of this great nation has stemmed his interest in Earth Sciences. "One of the main things that led me to this project was my enjoyment of our environment and the geology within it. This project gave me a chance to pursue the study of our earth and to incorporate prior knowledge of its features from my travels across Canada." Kevin hopes to continue the study of geological sciences at university, ... Kevin - My name is Kevin Dong. I am a grade 12 student at Waterloo Collegiate Institute in Ontario. Robotics is currently one of my main interests and my career goal is to become an aerospace engineer. I play guitar and violin and also ski (alpine race), play tennis and ping-pong. Recently, I have earned both my glider and private pilot licences from the Royal Canadian Air Cadets. I enrolled in the Geotechnology course at my school this year because I wanted to broaden my knowledge and experience outside of plain mathematics and physics. Participating in the science fairs is part of that experience. Working with my partner Kevin Strauss, I have learn...

#### Awards

#### Value

The Actuarial Foundation of Canada Award - Senior	\$1 000
Challenge Award - Environment - Senior	\$1 000
Sponsor: Youth Science Canada	
Excellence Award - Senior - Gold Medal	\$700
Sponsor: Youth Science Canada	
Dalhousie University Faculty of Science Entrance Scholarship	\$5 000
Senior Gold Medallist - \$5000 Entrance Scholarship	
Sponsor: Dalhousie University, Faculty of Science	
UBC Science (Vancouver) Entrance Award	\$4 000
Senior Gold Medallist - \$4000 Entrance Scholarship	
Sponsor: The University of British Columbia (Vancouver)	
University of Manitoba Entrance Scholarship	\$5 000
Senior Gold Medallist - \$5000 Entrance Scholarship	
Sponsor: University of Manitoba	
University of Ottawa Entrance Scholarship	\$4 000
Senior Gold Medallist - \$4,000 Entrance Scholarship	
Sponsor: University of Ottawa	
Western University Scholarship	\$4 000
Gold Medallist - \$4000 Entrance Scholarship	
Sponsor: Western University	
University of Windsor Entrance Scholarship	\$2 000
Senior Challenge Award Recipient - \$2000 Entrance Scholarship	
Sponsor: University of Windsor	
<b>Total</b>	<b>\$26 700</b>