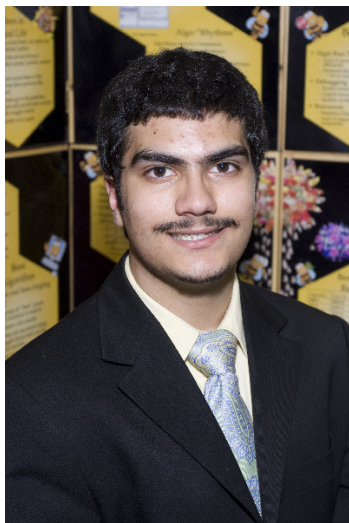


# CWSF 2009 - Winnipeg, Manitoba



## Arash Marzi

### A Bee Inspired Multi-Objective Optimization Algorithm For A Greener Tomorrow

**Division:** Earth & Environmental Sciences / Environmental Innovation

**Category:** Intermediate

**Region:** Strait

**City:** Antigonish, NS

**School:** Dr. John Hugh Gillis Regional School

**Abstract:** The application of a bees inspired algorithm to a reference system; in order to produce optimal solutions for the environmental/economic dispatch problem. The algorithm was given multiobjective capabilities and its performance was improved using a novel approach in developing a zone filter for the algorithm.

#### Biography

I am currently fifteen, in grade ten pre-IB and live in Antigonish, NS. I have many accomplishments, the main one is completion of two first year University courses on C programming at StFX, with one of the highest marks in class. I completed an online Gaelic course from St. Anna's Gaelic College. I have a black belt in Tae Kwon do and I am learning Capoeira. I've played the violin for 5 years and play oboe. I have been assisting the Antigonish Community Science Center for 7 years and I am also the creator and leader of my school's Robotics club. My interests range from computer science/engineering to history. I want to design an electric-powered car and to make a human useable AI interface implant. I enjoy literature from the 1800s like Fyodor Dostoevsky's Crime and Punishment and Oscar Wilde's Dorian Gray. Also I like fantasy/fiction books by R.A. Salvatore. I listen to metal, alternative, hip-hop, Celtic and intrumental music and play various video games. I am fluent in Farsi, English and learning Gaelic and French. I hope to become an engineer and work for a power or automotive company.

#### Awards

#### Value

The University of Western Ontario Scholarship Gold Medallist - \$2000 Entrance Scholarship Sponsor: University of Western Ontario	\$2 000
Honourable Mention - Environmental Innovation - Intermediate Sponsor: EnviroExpo, Presented by VIA Rail Canada	\$100
Gold Medal - Computing & Information Technology - Intermediate Sponsor: Intel of Canada, Ltd.	\$1 500
<b>Total</b>	<b>\$3 600</b>