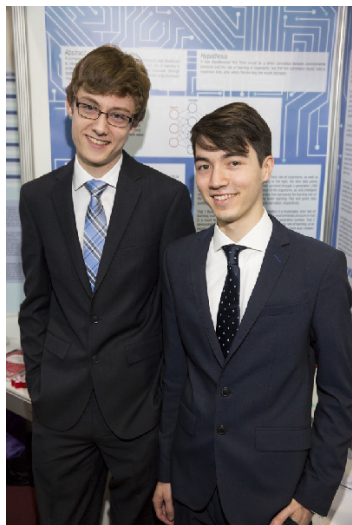


# CWSF 2015 - Fredericton, New Brunswick



## Evan Farrell, Max Kevin Kit Musing

### Simulating Brains in Artificial Organisms

**Challenge:** Discovery

**Category:** Senior

**Region:** Toronto

**City:** Toronto, ON

**School:** Danforth Collegiate & Technical Inst.

**Abstract:** A computer simulation of an artificial ecosystem was developed to measure the impact of environmental pressure on the rate of learning in organisms. Increases in pressure, through limiting food supply, resulted in a higher rate of learning, up to a point. Too much pressure resulted in a greatly decreased rate of learning.

#### Biographies

**Evan -** My name is Evan Farrell, I am a twelfth Grade student from Toronto, Ontario. I am in the Math and Science Technology (MaST) program at my current high school, and am an aspiring Software Engineer/Game Programmer. My partner Max Musing and I got the idea for our project from a YouTube video showcasing the incorporation of Artificial Neural Networks into a fighting simulation. As we were both very interested in Artificial Intelligence, we initially decided to create a simulation of an artificial ecosystem, using the same system of learning from that of the video. Max and I have many plans for the future of our project. Ultimately, we want to ma...

**Max Kevin Kit -** I have maintained Honour Roll throughout high school at Danforth Collegiate and Technical Institute's Math, Science and Technology program which allows access to special electives (e.g. Engineering) and accelerated course completion. In grade 8, I was a Legislative Page at Queen's Park. I was lead programmer for my middle school Robotics Team, winning top programming award Toronto City Finals; first place at National Robotics Open Championship; and eighth place FLL Open Championship. I received a regional plaque for perfect score in the Waterloo Canadian Computing Jr Competition. I have been Music Council Vice President and in Danforth'...

#### Awards

#### Value

Excellence Award - Senior - Bronze Medal Sponsor: Youth Science Canada	
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
<b>Total</b>	<b>\$2 000</b>

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