

# CWSF 2008 - Ottawa, Ontario



## Casey Banner

### Neural Networks: Image Recognition 2

**Division:** Earth & Environmental Sciences / None

**Category:** Senior

**Region:** Pacific Northwest

**City:** Smithers, BC

**School:** Smithers Secondary

**Abstract:** Previously, I designed a system and proof of concept program to implement image recognition in a computer system. This project's objective is to improve upon my design for an image recognition system that uses artificial neural networks, and to develop a proof of concept program utilizing it. Improvements would include increase in correct detection rate, faster program run time, and ease of use.

#### Biography

I am currently completing grade 12 at Smithers Secondary School; Smithers is a small community in central British Columbia. At school, I mostly enjoy physics, aviation, and music courses. I have been involved in jazz and concert bands for three years, playing piano, percussion, and bass, as well as tutoring the junior jazz band. I have maintained an A average throughout my schooling. Outside of school I participate in Biathlon at the local, provincial, and national levels. My other interests include computer programming, robotics, and electronic circuitry. I have held a part time job as a computer technician and network installer for the past four years, and often volunteer my time to help people with their computer problems. This is my fifth trip to the CWSF; I have been fortunate to win bronze, gold, and silver at past competitions.

#### Awards

#### Value

The University of Western Ontario Scholarship Bronze Medallist - \$1000 Entrance Scholarship Sponsor: University of Western Ontario	\$1 000
University of Ottawa Entrance Scholarship Senior Bronze Medallist - \$1000 Entrance Scholarship Sponsor: University of Ottawa	\$1 000
Bronze Medal - Computing & Information Technology - Senior Sponsor: Intel of Canada, Ltd.	\$300
<b>Total</b>	<b>\$2 300</b>