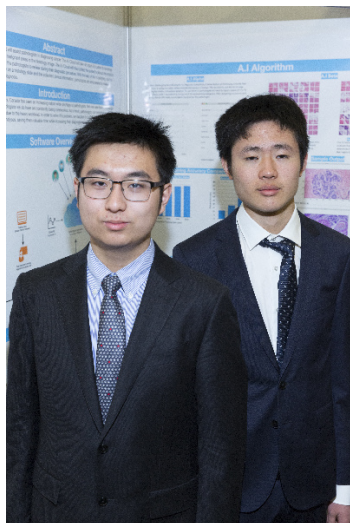


# CWSF 2018 - Ottawa, Ontario



## Jing Wang, Yi Yuan Ma

### Cancer Detection with Artificial Intelligence

**Challenge:** Health

**Category:** Senior

**Region:** Toronto

**City:** Toronto, ON, North York, ON

**School:** North Toronto

**Abstract:** Breast cancer is the most common cancer in women. However, its diagnosis could be delayed due to time-consuming and inaccurate biopsy interpretation. To solve this problem, we designed a machine learning program to inform pathologists of potential malignant tumours, greatly reducing the likelihood of misdiagnosis and increasing interpretation efficiency.

#### Biographies

Jing - My name is Jing Wang. I am from China where I finished Grade 10 last year and I am now studying in North Toronto C.I. I am especially interested in computation and logic, which has led to considerable abilities of mine in mathematics and computer science. In the past years, I have achieved great results in math contests such as AIME, Fermat, Euclid and those in China. Moreover, in the field of computer science, I have been able to use programming languages in my favour since Grade 10. So far, I have written several applications including games, problem solvers, puzzle templates and my current project with Yiyuan Ma --- cancer detection AI. I ...

Yi Yuan - I am a grade 11 high school student in North Toronto Collegiate Institute. I have a passion for improving health care diagnosis by using innovative technology. My partner and I were inspired to create a breast cancer detection AI after hearing about the inaccurate and slow process in developing pathology reports. Thus, we decided to use AI to solve this pressing problem.

#### Awards

#### Value

Excellence Award - Senior - Bronze Medal Sponsor: Youth Science Canada	
Carleton University Entrance Award Senior Bronze Medallist - \$1,000 Entrance Award Sponsor: Carleton University	\$1 000
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>\$3 000</b>