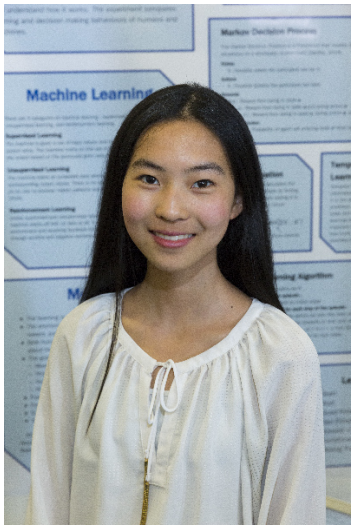
CWSF 2018 - Ottawa, Ontario



Lily Ni

Exploring Artificial Intelligence via Reinforcement

Challenge: Information
Category: Junior
Region: Windsor
City: Windsor, ON
School: Talbot Trail P.S.
Abstract: I wanted to enter into the field of artificial intelligence by studying how machines learn. I wrote a program that follows a reinforcement learning algorithm called "Q-Learning" and compared decision making and learning behaviours of the program to that of a human.

Biography

Hello! My name is Lily, an eighth grader at Talbot Trail Elementary in Windsor, Ontario. I was homeschooled for a year in Beijing in grade 7, where I had my first exposure to programming and cultivated this passion through online courses and hackathons. My science fair project stemmed from my interest in computer science and my curiosity of the latest technological trends such as artificial intelligence. I enjoy constantly learning and improving myself through immersing myself in music, playing sports, and competing in the Caribou math contest, which I ranked top 15 in the world. I obtained the RCM Grade 9 Piano certificate and started a mini band at my school to fuel my passion for music. I also play on the basketball, volleyball, and badminton teams at my school. Regarding further investigations on my project, I plan on learning more complex algorithms and develop innovations that would provide tangible benefits in the real world. My advice for other students is to pick a topic that you are genuinely interested in, making the science fair project a fulfilling journey for yourself. I am honoured to attend CWSF and look forward to an enriching experience with inspiring individuals across Canada.