Laurence Liang

Le cerveau en algorithme

Challenge: Health
Category: Intermediate
Region: Montréal RM
City: Roxboro, QC
School: Collège Jean-de-Brébeuf

Abstract: I developed a method that allows computers to efficiently learn by themselves based on how the brain works. My research is at the intersection of AI, the study of intelligent machines, and of neuroscience, the study of the brain. Creating simple yet powerful ways for computers to think can improve many aspects of our daily lives, such as self driving cars and personal health care.

Biography

I am a secondary IV student at Collège Jean-de-Brébeuf in Montréal passionate about artificial intelligence and on changing the world. I have participated in multiple programming competitions, known as hackathons, notably winning MariHacks 2018 and organizing Québec's first high school hackathon. I have also volunteered at a McGill AI lab, am a long time mentor at my school's robotics team, scored my class' best average for 3 consecutive years and am in the top 10 cadet fencers in my province. My project started as I began to code algorithms for AI. I was fascinated by the mere thought of being able to teach machines to learn by themselves. I strove to develop algorithms that were not only based on mathematical concepts as they are today, but to design AI that is inspired from human intelligence by studying the brain. What I learned was to never give up. I encountered tough times throughout my project, but I am happy with the results I got. In the near future, I hope to create more powerful AI tools through understanding human intelligence by examining how the human brain is wired, with the goal to push the limits of what we are capable of.

Awards	Value
Excellence Award - Intermediate - Bronze Medal Sponsor: Youth Science Canada	
Western University Scholarship Bronze Medallist - $1000 Entrance Scholarship Sponsor: Western University	$1 000
Total	$1 000