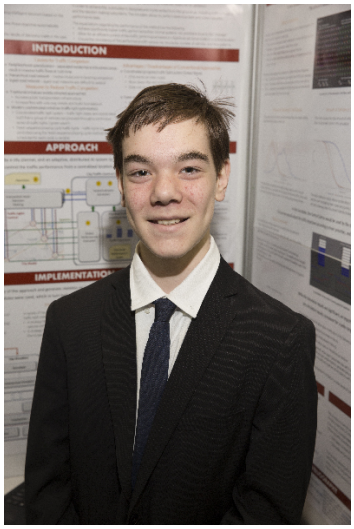
CWSF 2019 - Fredericton, New Brunswick



Adrian Nitu

A Novel Artificial Intelligence-Based Approach to Dynamic Traffic Management for Smart Cities

Challenge: Innovation
Category: Junior
Region: Ottawa
City: Ottawa, ON
School: Vincent Massey P.S.

Abstract: Nowadays, city traffic is recognized as a big problem. In my project, I created a new method for traffic management that greatly improves traffic conditions. It allows city planners to control traffic performance more directly. Over time, the traffic control system also learns how to manage the traffic more efficiently, constantly improving itself. Using this method, the time spent in traffic could be halved.

Biography

My name is Adrian Nitu, and I am a seventh-grade student in the gifted program at Vincent Massey Public School, in Ottawa. My whole life, I've loved tackling riddles and quirky maths problems to challenge my critical thinking skills. Traffic management fits neatly into that description, which is why I decided to pursue my project, which uses a dynamic, flexible, AI-based system to allow for fine-tuning the traffic performance in a city. In the future, I predict I will continue to work on artificial intelligence-based projects, because the limitless possibilities that it has awe me. I have won many maths awards, such as the Math Kangaroo Math Competition and Junior Math Olympics Gold Medal Awards. Recently I've also won the Ottawa Regional Science Fair's Gold Medal and CWSF Sponsorship Awards. Other extracurricular activities I participate in include piano and sports. I find science captivating, but it isn't always easy. The advice I would give to new Science Fair participants is to always be ready to change course. Be open to adapt and learn, and never stop thinking creatively. After all, a will to discover is what has fuelled science in the past and will undoubtedly do so in the future.

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

Youth Science Canada
PO Box 297
Pickering ON L1V 2R4
www.youthscience.ca / info@youthscience.ca
416-341-0040