

# Richard Y. Zhu

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(905) 726-8858

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## EDUCATION

### Bayview Secondary School

Richmond Hill, ON

- Activities: Prefect Executive, Bayview DECA, Bayview FBLA, Swim Team, York Region Dragon Boat Club, Programming Club
- Honors: 12<sup>th</sup> National Score on CAP Physics Exam, Two-time DECA International Finalist, 4th place (Grade 9 and 11) in Central Ontario for Sun Life Financial's Canadian Open Mathematics Challenge, 7th junior speaker at University of Toronto's Hart House Debate Tournament, 2nd placing team at the 2016 OSDU Junior Provincials Championship Debate Tournament
- Self completed 6 university-level Advanced Placement classes in English Literature and Composition, Physics C: Mechanics, Calculus BC, Computer Science, Microeconomics, and Macroeconomics; received AP National Scholar award
- Bronze Medal Recipient at 2017 International Young Physicists Tournament (Physics World Cup); 1st place at 2017 and 2016 Canada Young Physicist's Tournament

### Massachusetts Institute of Technology

Boston, MA

- 18.01: Single Variable Calculus (Online learning via MIT OpenCourseWare)

### Aurora Senior Public School

Aurora, ON

- Honors: Recipient of the Ontario Principals Council's Principal's Award for Student Leadership; Recipient of the Academic Proficiency award (highest average mark of the graduating class); Perfect score on Waterloo University's Gauss Mathematics Competition; Perfect score on Mathematica Centrum's Lagrange Mathematics Competition

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## EXPERIENCE

### University of Toronto, Laboratory of Complex Fluids

Toronto, ON

Research Assistant

Summer 2017 - Present

- Designed various devices and apparatus for lab experiments; process included blueprint design, budgeting and ordering of materials, construction, and testing; carried out experiments with high speed camera; learned and coded analysis program in MatLab in three days
- Created device (similar to a parallel-plate rheometer) to allow control of separation and angle between 2 circular plates that would allow a pressure gradient to form, which was used to confirm current theories on sheared suspensions put forth by research literature, in Summer 2018 continued a graduated M. Eng. student's research, conducting various experiments to advance theory

### Hackathons

Various

Participant

2016 - Present

- Winner of Best Financial Hack at THacks 2 (University of Toronto) – *cryptocurrency and mobile app with NFC capabilities*
- Finalist and Winner of Best .tech Domain Prize at PennApps XVI (University of Pennsylvania) – *home automation device*

### myCryptoHippo

Toronto, ON

Co-founder

2017 - Present

- Helped develop first prototype of cryptocurrency simulator and education platform; won 3rd place at ProtoHacks, JA Company of the Year, ROI and Innovation awards, FexEx Junior Business Challenge (\$25 000), and 3<sup>rd</sup> place at SAGE SRB international competition
- Created full-stack MEAN web application utilizing MongoDB, Express, Angular, and Node JS to produce an event-driven, non-blocking I/O model of a web application, which used Angular JS front-end to register and authenticate users before communicating with the back-end through APIs to send JSON web tokens; deployed to Heroku
- Managed over \$8500 in revenue from events and sponsorships, including Coinsquare (\$2000), Deloitte (\$500), and Loyalty One (\$527)
- Organized Toronto Crypto Summit, a sell-out event that drew over 300 high-profile professionals, including speakers Anthony Di Iorio (co-founder, Ethereum – second-largest cryptocurrency), Som Seif (CEO, Purpose Investments) and Darrell MacMullin (former head, PayPal Canada)

### Metroland Media

Aurora, ON

Newspaper Carrier

2015 - Present

- Delivered newspapers and flyers on a weekly basis to help save for university tuition

### Aurora Public Library

Aurora, ON

Reading Buddies Volunteer

2015 - 2017

- Tutored elementary students having difficulty with English
- Improved students' reading abilities and received positive feedback from their parents

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## ADDITIONAL INFORMATION

**Proficient in:** Java, C, C++, C#, HTML, CSS, Javascript (ExpressJS, AngularJS, Node.JS, PugJS, React), MongoDB, MEAN Framework

**Additional Language:** Fluent in Mandarin Chinese

**Certifications:** Lifesaving Society's Bronze Cross and First Aid with CPR-C certification

**Other Non-Academic Awards:** 1st Place at John Grootveld Sr. Officials Classic 50 Meter Freestyle Swimming Competition, 2nd Place at RHAC Winter Invitational 2013 200 Meter Freestyle Swimming Competition, 2nd Place at Ontario Chess Challenge Qualifier Open Chess Tournament, 2nd Place at Mississauga Canadian Youth Chess Challenge

**Interests:** Programming, Chess, Swimming, Cello, Saxophone, Piano