# Charles Zhang

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#### Education

## University of Waterloo

• Bachelor's of Computer Science (co-op program)

Expected Graduation: April 2023

## Grade 12, Lisgar Collegiate Institute

September 2014 – June 2018

- 98% GPA (Lisgar Silver Medal Recipient), enrolled in the gifted program
- William Arid Ross Scholarship for highest performance in Grade 12 Mathematics
- Adam Ballantyne Scholarship for highest Grade 12 average
- Math Kangaroo: 11th in Canada, 2nd Ottawa; Avagadro Chemistry Contest 97th percentile in Canada;

## Completed DELF B1 Certification

November 2017

# Work Experience

## Software Developer, Ciena

July 2018 – August 2018

- Developed software tools to migrate technical requirements from the DOORS legacy database to the new Jama database system.
- Worked with Angular CLI and Bootstrap to develop responsive and accessible internal web-apps
- Gained experience with Git, database systems, project management, and collaboration

#### Clubs

# President, Lisgar DECA Business Club

September 2016 – July 2018

- Lead a team of 5 student executives and run training for the DECA Team of 40 students
- Manage thousands of dollars in planning for the provincial DECA trip in Toronto
- Founded a stock market challenge and a finance-themed escape room to promote financial literacy.

#### Club Head, Lisgar Math Contest Club

September 2016 – July 2018

- Deliver interactive math lessons in topics such as number theory to over 25 students each week
- Organize additional math events such as the CTMC, a school-wide team mathematics competition
- Manage communication and promotion for the Math Department through social media and email

## Founder, Lisgar Game Jam

March 2017

- Worked closely with the Lisgar Computer Science Department to bring a hackathon to Lisgar
- Created and ran workshops in Processing, a Java based language, to introduce students to coding

#### **Projects**

## Tetris Neural Network

March 201

• Over March Break, Self-learned Python and Machine Learning theory to develop an automated AI to play Tetris using a thee layer Neural Network and a Roulette Genetic Algorithm evolution system.

## **Summer IOS and Android Development**

August 2016 – October 2017

- Developed two separate mobile applications, EzJigsaw for IOS and TapeMeasure for Android. EzJigsaw is available on the IOS app store and was downloaded over 300 times in the first month.
- Practiced project management, testing, object-oriented programming, and revision control

#### **Arduino Development**

October 2016 – January 2017

- Worked with an integration of hardware and software to develop an autonomous maze-solving robot
- Developed hardware skills, including the creation and implementation of wiring diagrams

## Website Development

October 2017 – Present

- Developed a personal website as well as websites for the Math Contest Club and DECA business club so that students can stay updated and access previous lessons
- You can find links to the club websites from my personal website, charleszhang.ca

#### Skills

- Languages: English and French
- Programming: C++, C, Python, Swift, Java, Arduino, JavaScript, HTML, CSS, DXL
- Technical: Git, Xcode, Android Studio, Arduino, Microsoft Office, Photoshop, DOORS, Jama