# Charles Zhang

Email: icharliezhang@gmail.com

Cell: (613) 600-2451 Website: charleszhang.ca

#### Education

## Grade 12, Lisgar Collegiate Institute

September 2014 – Present

- 97% GPA (Lisgar Silver Medal Recipient), enrolled in the gifted program
- Awards: Math Kangaroo Contest: 11th in Canada, second in Ottawa; Waterloo Avagadro Chemistry Contest 97th percentile in Canada; Chem 13 News 84th percentile in Canada; and 8 subject awards.

## Completed DELF B1 Certification

November 2017

### Experience

## Club Head, Lisgar Math Contest Club

September 2016 – Present

- 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

### President, DECA Business Club

September 2016 – Present

- 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 bi-annual stock market challenge and a finance-themed escape room to promote financial literacy in the student population.

Personal Math Tutor October 2017 – Present

- Independent tutor offering private sessions in math, primarily in Grade 12 Functions and Calculus
- Creates web-applets in partnership with the Lisgar Math Department to improve math education

#### Founder, Lisgar Game Jam

March 2017 - Present

- 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
- Promoted the event by creating a website, selling custom buttons, and advertising on social media

#### **Projects**

## Summer IOS and Android Development

August 2016 – October 2017

- Developed two separate mobile applications over two summers, EzJigsaw for IOS and TapeMeasure for Android. EzJigsaw is currently released onto the IOS app store, and has over 300 downloads.
- Practiced project management, testing, object-oriented programing, 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, charlesyz github.io

March 2017 - Present

## Tetris Neural Network Development

• 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.

#### Skills

- Languages: English and French
- Programming: C++, C, Swift, Java, Ardiono, JavaScript, HTML, CSS
- Technical: Xcode, Android Studio, Arduino, Microsoft Office, Photoshop