



# Joey Shi

[joey.shi@alumni.ubc.ca](mailto:joey.shi@alumni.ubc.ca)

<https://github.com/joeyshi12>

<https://joeyshi.tech/>

## Technical Skills

### Programming Languages

Python

TypeScript

Java

C++

C

C#

Assembly

### Tools / Environments

Git

MATLAB

Android Studio

LaTeX

Unity

### Libraries

Scikit-learn

Numpy

Matplotlib

Pygame

p5.js

## Education

University of British Columbia

Mathematics & Computer Science

2018 – 2022

cGPA: 4.33 / 4.33

## Projects

### Differential Equation Solver | Python

- Used finite difference methods and Numpy array manipulation to solve ordinary and partial differential equations
- Implemented methods for recording and animating solutions
- Designed GUI with TkInter for inputting parameters

### Trivia Train | Java, Android Studio

- Requests and processes JSON data from the Open Trivia API
- Designed quiz class to distribute questions and compute score
- Implemented simple layouts and high score saving

### Cool Games Website | JavaScript, HTML5, CSS

- Programmed a variety of web games using p5.js
- Designed frontend of website using pure HTML and CSS

## Work Experience

### University of British Columbia

#### WeBWork Content Developer | July 2020 – December 2020

- Coded WeBWork questions in Perl for UBC calculus exams
- Integrated visuals and animations into past questions using the Desmos API and JavaScript

### Earls

#### Line Cook | September 2016 – June 2018

- Cooked panfry dishes during evening shifts 3 times a week
- Portioned food and washed dishes and equipment

## Awards

### Trek Excellence Scholarship | August 2020

- Placed in the top 5% of students in my undergraduate year, faculty, and school

### Science Scholar / Dean's Honour List | June 2020

- Maintained a standing of over 90% by the end of my second year while carrying a course load of 30 credits