

# Allen Gao

## Computer Science

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## SKILLS

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**Tools & Languages:** Proficient: Java, C | Experienced: C#, Racket, HTML/CSS, Markdown

**Other:** Hugo, Chocolatey, Git

## PROJECTS

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### Image Editor, Java | Greenfoot

- Developed application with an intuitive user interface to edit images in **Java**
- Utilized Gaussian distribution and bitmaps to implement a blur filter to reduce image noise and detail
- Used file I/O to save and load images locally, as well as convert images to different file types

### Grid Game, Java | Greenfoot

- Developed a 2D top-down, procedurally generated strategy game using **object orientated design** in **Greenfoot**
- Implemented a map-generating algorithm to randomly generate levels along with random terrain
- Incorporated function to read and write game data to save files

### Personal Website, Hugo | HTML/CSS | Markdown

- Built a CV website using **Hugo**, **HTML**, and **Markdown**, deployed using **GitHub Pages**

### Calculator Widget, C# | Visual Studios

- A basic calculator widget made using **Visual Studios**
- Developed in **C#** and gained understanding of class hierarchies and event-driven programming

## EXPERIENCE

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### Primary Instructor, Kumon

03/2017 – 11/2017 | Markham, Canada

- Developed effective work habits and problem-solving skills in classes with 10+ students
- Monitored student progress and developed reports for center director to ensure effective learning
- Enhanced student understanding of math, resulting in a 50% increase in speed

### Peer Tutor, Pierre Elliott Trudeau High School

09/2018 – 06/2019 | Markham, Canada

- Participated after school to provide math tutoring for students
- Employed effective teaching techniques to individually help students understand and apply math concepts

## EDUCATION

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### University of Waterloo

09/2019 – present | Waterloo, Canada

*Candidate for Bachelor of Computer Science (Co-op)*

- Awarded President's Scholarship of Distinction
- GPA: 3.92

## AWARDS

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### CEMC Euclid Math Contest

2018

Top 25% in Canada

## INTERESTS

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Sketching | Reading | Keyboard Enthusiast | Tabletop Games | Programming |