

Allen Gao

Computer Science

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SKILLS

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

Other: Hugo, Chocolatey, Visual Studios, Git

PROJECTS

Grid Game, Java

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

Image Editor, Java

- 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

Personal Website, Hugo | HTML/CSS | Markdown

- Built a static website using **Hugo**, **HTML**, and **Markdown**, to display personal projects and links; deployed using **GitHub Pages**

Calculator Widget, C# | Visual Studios

- Built a calculator app in **Visual Studios** and **C#**
- Implemented classes, functions, and constructors using knowledge of **object orientated design** principles

EXPERIENCE

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

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

CEMC Euclid Math Contest

2018

Top 25% in Canada

INTERESTS

Sketching | Reading | Keyboard Enthusiast | Tabletop Games | Game Development