Allen Gao

Computer Science

SKILLS

Tools & Languages: Proficient: Java, C | Experienced: C#, Racket

Other: Object Orientated Design, UX Design

PROJECTS

Basic 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

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

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 novels, game design, tabletop games