Alan Bleisch

alanbleisch@live.com

425-588-1868

Seattle, WA

EDUCATION

B.S. Computer Science, June 2024

University of Washington – Seattle, WA

GPA: 3.93 /4.00

Also completing a double major, B.A. in Greek, June 2024

SKILLS

- Unity
- C++
- OpenGL
- C#
- Gitlab CI/CD
- Kanban

WORK EXPERIENCE

Teaching Assistant – CSE457 Computer Graphics, CSE341/413 Programming Languages

Paul G. Allen School of Computer Science & Engineering. Seattle, WA.

September 2021 – March 2022; September 2023 – present

- Taught programming language theory with OCaml and Racket and computer graphics with Unity and C#, in group quiz sections and one-on-one office hours.
- Collaborated with a professor and 3-5 fellow teaching assistants to return consistent grading and feedback for homework and projects, taking the lead on an effort to improve course infrastructure.

Instructor – Programming Games in Scratch

Coding with Kids. Redmond, WA. June 2021 – December 2021

• Taught late elementary-aged students the basic skills and paradigms of computer programming through 2D sprite-based games implemented in Scratch and Python.

Math Tutor – Trigonometry and Calculus

Bellevue College Math Lab. Bellevue, WA. September 2019 – March 2020

• Guided college students to form their own solutions to problems, aiming to pass on a solid understanding of mathematical concepts.

PROGRAMMING EXPERIENCE

Casual Traffic Management Game: Class Project. January 2024 – March 2024

- Led a 2.5D web game project from paper prototyping to a minimum viable product, then used data-driven iteration based on early access audience. Available at bit.ly/rlglitch.
- Used C# and Unity for development, Kanban for agile project management, GitLab for version control and CI/CD, and a MySQL database for data-driven analysis of each design iteration.

Sandbox Exploration Video Game: Personal Project. April 2023 – present

- Implementing a voxel-based PC game built on a custom engine using C++ and OpenGL.
- Profiled the graphics pipeline and improved framerates using instancing and several GLSL shaders to efficiently handle diverse models in the voxel environment.

File Search Tool: Class Project. January 2022 – March 2022

- Pair programming project to create a file indexer and search tool served via HTTP to a web server.
- Using C and C++, implemented multiple data structures and file I/O for server backend and multithreaded HTTP handling for frontend.

Sports Simulation: Personal Project. August 2019 – June 2022

• Developed models to simulate a sports league at several levels of detail using C# and Excel.