Zackary Entwistle

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EDUCATION

Brown University — Junior and Computer Science B.A. Candidate Sep 2019 - May 2023 | Providence, RI GPA: 3.9/4.0

Ewha Womans University — Korean Language Intensive Student Jul 2019 | Seoul, South Korea

PROGRAMMING EXPERIENCE

Brown RISD Game Developers — *Lead Sound Designer/Programmer* Sep 2019 - Present | Providence, RI and Remote

- Utilizes Unity, C#, and Git to program components of videogames.
- · Collaborates in interdisciplinary teams of artists and programmers to design and develop videogames; contributed to 6 indie titles thus far (with the most recent available at zentwistv.itch.io).
- · Leads the sound design team with expertise in music composition and sound effect curation to define the auditory character of the games.

CSCI 1950u: 3D Game Engines — *Instructor*

Sep 2021 - Present | Providence, RI

- Programmed a 3D game engine from scratch in C++ and OpenGL, including physics engines, collision detection, particle systems, etc.
- Develops teaching materials such as lectures with slide decks, project demos, and stencil code to teach the course in Spring 2022.

CSCI 0160: Data Structures and Algorithms — Teaching Assistant May 2021 - Aug 2021 | Remote

- Helped teach ~200 students programming fundamentals in Python.
- · Lead debugging and conceptual help sessions 2 hours each week to review students' Java code and resolve bugs in their implementation.
- Held two sections each week with ~10 students each to review lecture material and verify understanding of the 4 coding projects (in which students implemented PageRank, seam carving, and ML decision trees)

WORK EXPERIENCE

Brown RISD Game Developers — Executive Board Member

Nov 2020 - Present | Providence, RI and Remote

- Works with a team of 6 officers to manage a club of ~70 members.
- · Organizes club logistics, such as scheduling meetings, inviting guest speakers in the gamedev industry, and liaising with the Brown SAO.
- Created a constitution and registered the organization to be officially recognized by the University in order to access more funding.

A'ingae Language Documentation Project — Research Assistant Oct 2019 - May 2020 | Providence, RI

- Assisted with typological research of A'ingae, an indigenous language isolate spoken in Ecuador, to create multipurpose language materials.
- Translated and copy edited texts in A'ingae, Spanish, and English.
- Managed data archives and linguistically analyzed the A'ingae lexicon.

TECHNOLOGIES

Languages

C/C++, Java, C#, Python, SQL

Software

Unity, Maya, MuseScore, Reaper, Audacity, FLEx

Version Control/IDEs Git, Qt, VSCode, Visual Studio, IntelliJ, Eclipse

COURSEWORK

Computer Science

- Videogame Development
- 3D Game Engines
- Computer Graphics
- Intro to 3D Animation
- Data Science
- Computer Systems
- Algorithms
- Data Structures

Mathematics

- · Linear Algebra
- Statistics and Probability
- · Multivariable Calculus
- Ordinary Differential EQs

AWARDS

U.S. Department of State NSLI-Y Scholarship

Worcester Telegram Student Achiever

UMass Collegiate NAfME Excellence in Composition

LANGUAGES

Portuguese (intermediate) Korean (intermediate) Spanish (intermediate) Japanese (beginner)