

# 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 [zenthwisty.itch.io](https://zenthwisty.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, FLEEx

**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*)