William Ozeas

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Unity | C# | C | C++ | Standard ML | Python | React | Git | FMOD

Education

Carnegie Mellon University, Pittsburgh, PA
Bachelors of Computer Science and Arts (Music) - GPA: 3.96 - Expected Graduation May 2023
Relevant Coursework

Principles of Imperative Computation, Parallel & Sequential Data Structures & Algorithms, Intro to Computer Systems, Computer Graphics, Principles of Functional Programming, Computer Security, Twisted Signals: Multimedia Processing

Work Experience

Software Development Intern, Amazon; Remote (Seattle, WA) — June-August 2020
- Implemented React front end of internal website to help Amazon monitor delayed orders from 3rd party sellers.
- Gained experience working in teams and learning new technology at large companies. Collaborated with other interns and employees to design an API to access an order database.

Web Developer, CV Enterprises; La Crescenta, CA — January-June 2019
- Designed "Injury Tracker" web app designed in Ruby on Rails using a SQLite database to store information about injuries for high school sports nurse. Team of 2.

Projects

Games
polyrhythm - **All Programming** Unity, C#   2021
- Created rhythm game solo project with over 3,000 written lines of code.
- Designed event system to synchronize music and gameplay using FMOD callbacks.

Haunted VR - **Sound Implementation** Unity, C#   2021
- Sound for a VR horror game in a team of 37. Interfaced with FMOD middleware.
- Implemented 40+ effects including an adaptive piano sound effect based on an object's speed.

Death Road To Doggie Town - **UI Programming & Sound Implementation.** Unity, C#   2021
- Sound & UI for an 80's themed endless runner in GMTK Game Jam. Won 442/5,755 games in presentation.
- Gained experience working quickly and efficiently through 48 hour game jam.

Escape From Lab 8 - **Gameplay Programming & Sound Implementation.** Unity, C#   2020
- Programming for traditional rogue-like. Collaborated with 8 other programmers to work with rogue-like framework.
- Worked with two composers to implement adaptive soundtrack.

Octave - **Gameplay Programming.** Lua   2019
- Created core gameplay loop for rhythm game in a team of 10.

Other
Scotty3D - **Graphics Programming** C++   2021
- Implemented several features in a 3D modeling software, including several mesh transformations, realistic lighting using path-tracing, and animation rigging.

Malloc Project - **Systems Programming** C   2019
- Implemented memory allocator in C with more efficient throughput and utilization than the standard C library through aggressive optimization.

Shell Project - **Systems Programming** C   2019
- Wrote a shell in C, capable of running and managing foreground and background tasks using signal handlers and child processes.

Activities

Carnegie Mellon Game Creation Society - **Programmer, Sound Designer, Composer** — 2019-Present
- Created a game on teams of 6-14 every semester at Carnegie Mellon.

Undertale Online Orchestra - **Co-Founder, Council Member, Mixer, Editor, Performer, Arranger** — 2016-2019
- Lead worldwide group of musicians remotely covering the soundtrack of the game Undertale. 80+ collaborative YouTube videos, managed over 200 members. Mixed songs with 50+ recordings.

4-Piano Orchestra, YouTube Channel — 2015-current hiatus
- Arranging/Performing music from games and shows for 4 pianos. Included extensive audio mixing, visual editing and performance, with elements of graphic design and costuming. Gained over 5,000 subscribers and 1.9 million views.