Conor O'Malley

2611 Atherton Drive, Orlando, FL
407-435-0184 conor4arms@gmail.com linkedin.com/in/conorpo github.com/conorpo

Education

University Of Central Florida **Aug. 2020 – June 2023**
Bachelor of Science in Computer Science, BS *Orlando, FL*

Cypress Creek High School **Aug. 2016 – June 2020**
High School Diploma *Orlando, FL*

Relevant Coursework

- Computer Science I & II
- Systems Software
- Discrete Structures I & II
- Principles of OOP
- Security in Computing
- Differential Equations
- Technical Writing
- Computer Graphics

Experience

Dosed Inc. **Aug 2018. – Feb. 2019**
Backend Developer *Remote*

- Working to develop an online shopping web-application.
- Creating database models, express middleware, routes, and services such as a role-permission service, a user service, and a shipping-address service.

StemEduc8 **June 2018 – September 2018**
Math and Computer Science Tutor *Orlando, FL*

- Work with students to teach them computer science and math skills, both one-on-one and in a classroom format, with a focus on calculus and programming.

Projects

School Nodemap | *Javscript, Canvas API* **June 2018 - Aug 2018**

- Built an online tool to create visual graphs, allowing for labeled nodes, weighted edges, and cosmetic settings on nodes.
- Made a separate tool that utilizes those graphs for helping students plan out classes at their school.

Raymarching Mandelbulb Visualization | *Javscript, WebGL, GLSL* **January 2021**

- Using WebGL and raymarching algorithims, I created an in-depth visualization of the mandelbulb (a three-dimensional extension of the mandelbrot set) with advance camera controls and lighting. The rendering was done completely from scratch in a fragment shader.

Budget VR | *Javscript, WebGL, Socket.IO, Express* **KnightHacks 2021**

- In 24 hours made a virtual video call site, where users can connect online and see each others video feeds represented as 3D objects in virtual space (Before Meta Verse was even announced)

Bitflip | *Javscript, C++, WebGL, Express, Emscripten* **February 2022 - Present**

- Made a fully browser based logic gate simulation where users can create logic circuits using gates and inputs and outputs
- Runs natively on C++ via Emscripten, visuals GPU accelerated via WebGL, all hosted off a Node JS server.

Technical Skills

Languages: Javascript, C++, C, Java, HTML/CSS, SQL, Python, C
Developer Tools: VS Code, GCP, Git, Bash, npm, AWS, Unix
Technologies/Frameworks: React, Vue, MongoDB, node.js, ESNext, Express, TypeScript

Leadership / Extracurricular

Programming Team **Aug. 2020 – Present**
Varsity Member *University of Central Florida*

- Placed highly in regional and national competitions including ICPC and Mercer.
- Developed critical problem solving and team building skills while competing.
- Learned various additional computer science data structures, algorithms, and strategies.