RYAN SMITHEY, SOFTWARE ENGINEER

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TECHNICAL SKILLS

PYTHON	JAVASCRIPT	TYPESCRIPT	SQL	MICROSOFT VISUAL STUDIO	POSTMAN	C#	NODE.JS
HTML5	CSS	JEST	SUPERTEST	MONGODB	C3	DOCKER	REACT

WORK HISTORY

OPEN SOURCE LABS LOGYARD - SOFTWARE ENGINEER — 2023-Present
- Created software that collects, parses, stores, and analyzes log data from various sources, such as servers, applications, and cloud environments.
- Remote project, focused on fast iteration through strong collaboration.
- Tools used: Typescript, JavaScript,React, Redux, Node, Express, NoSQL(MongoDB, Mongoose), SQL (PostgreSQL), C3, Vite, Webpack, HTML5, CSS, Tailwind, Jest, Supertest, Vitest, Docker, Trello, Cypress, ESLint, Prettier, NPM.

AGRI SUPPLY - SCANNING COORDINATOR — 2022 - 2023
- Customer support, Inventory management, Sales, Register, Closing, and other required positions.

SBL PROPERTIES - CONTRACTOR — 2021 - 2022
- Evaluated properties for potential remodeling and sale.
- Performed electrical, flooring, HVAC installation, tracked cost and budget.

GE HEALTHCARE - PROCESS ENGINEER — 2018 - 2019
- Downloaded Oracle database into excel to locate over $100K worth of misplaced inventory.
- Used root cause analysis to correct inventory procedures.

OPEN SOURCE

Unity Marching Cubes — 2022-2023
- Utilized Unity C# bytecode. This drastically simplified the read/write system for GPU shader buffers. It also provided orchestration between GPU buffers. Performance can be regained through IL2CPP for machine code.
- Drastically improved performance with HLSL compute shaders. Requiring the same operation on millions of vertices is an expensive but parallelizable operation. HLSL allowed full utilization of GPU hardware at the cost of simplicity.

PUBLIC TALKS

- WebAssembly Tech Talk. Discussed the utility of WebAssembly for existing applications to be converted to a web application, and the scalability of WASM programs running in a performant virtual environment.
- The Importance of Logging in Web Applications - Medium article on continuous logging and a potential solution.
- Marching Cubes in Unity C# - LinkedIn article about my implementation of a marching cubes algorithm.

EDUCATION

Bachelor of Engineering, Major in Industrial Engineering — 2017-2021
- Computational physics, data statistics, resource optimization, CAD, Calculus, supply chain design

INTERESTS

- Learning new languages. Each one provides a unique solution to a recurring problem. Currently looking into Rust
- Smite MOBA. A game focused on teamwork and cooperation. The right group makes this an incredible game
- Ultimate Frisbee. Not at a competitive level just pickup games. Easy to introduce new players and tons of fun