UC San Diego - Mathematics-Computer Science Major, 3.4 GPA

LANGUAGES: Java, JavaScript, TypeScript, HTML/CSS/SCSS, C, C++, C#, Python, GLSL

FRAMEWORKS/TOOLS/APIs: React, Angular, Svelte, Next, Node, Hasura, SQL, Azure Functions, Postgres, Netlify, GraphQL, Git, Jira, Vim, LaTeX, OpenGL, OSGi

EXPERIENCE:

Freelance Work - Fullstack Engineer

MARCH 2024 - JUNE 2024

- Design and implement user-facing pages in Angular for an all-in-one school administration tool
- Architect end-to-end services using Azure functions and an Azure SQL DB

Liferay Inc. | Diamond Bar, CA - Associate Software Consultant

MAY 2023 - DEC 2023

- Full-stack development/consulting position
- Provide effective strategies to third-party clients on how to best leverage Liferay DXP to meet their functional requirements
- Assist in integrating existing client services with the Liferay backend
- Multi-project experience using React/Freemarker/SCSS to create sleek and UX-friendly components that meet design specifications
- Used agile dev cycles/SDLC best practices to organize tasks
- Developed under a continuous integration workflow using Github Actions

FRC 7157 µBotics | Brea Olinda/Sunny Hills HS — Lead Programmer

SEP 2017 - JUNE 2020

- Developed a competition bot with multi-threaded autonomous subroutines, closed-loop control (PID), and an award-winning vision pipeline
- Integrated a suite of motor controllers and a Linux coprocessor (NVIDIA Jetson Nano) over a network-table based interface
- Taught and led a team of 8 peers throughout an intense twelve week sprint of competition, collaborated using Git source control
- Wrote a custom library for a Pixy 2 cam to interface with the coprocessor over I2C protocol

PERSONAL PROJECTS:

svo-raytracer

- Realtime Java/LWJGL voxel path tracer based on the paper Efficient Sparse Voxel Octrees by Samuli Laine and Tero Karras
- 2 bounces 1080p ~30fps, up to 2048^3 world size, implemented on GPU
- Created a custom octree layout to maximize memory coherency and minimize ray traversal time

Fearsha

- Developed React/TS front-end for a payment and booking service designed for day-of booking and stat tracking in the escape games niche
- Implemented static page rendering with Next.js, created queries in GraphQL to populate front-end components from a PostgreSQL database