Michael Vaden

Projects

Djinn Code Generation CLI

github.com/SwampPear/djinn

- CLI for automatic code generation from natural language implemented in Rust
- implemented standardized natural language to compute instruction API with versatile prompt formatting

Lexi github.com/SwampPear/lexi

- library written in C++ for tokenization of strings using regular expressions
- intended for use in compilers or compression algorithms

GACRC Portal gacrc.uga.edu

- implemented web app with Django and Three.js that allowed researchers at the University of Georgia to manage their research groups and interface with Sapelo2
- provided much-needed automation for resource management in replacing series of bash scripts

Personal Website swamppear.xyz

- used WebGL for caustic ripple effects
- · implemented creative CSS microinteractions and interactivity all served with Go Fiber

Experience

Delta Air Lines September 2023 - Present

Co-op, ACS Tools and Technology

- used data-driven analysis skills to lead in the implentation and maintenance of technologies at Delta
- developed PowerBI dashboards for key data metric visualization
- implemented automation processes (Microsoft Power suite) and scripts (Python, SQL) for reocurring tasks

University of Georgia

January 2022 - December 2022

Software Development, Georgia Advanced Computing Resource Center

• implemented web app so that researchers at the University of Georgia could manage their research groups and interface with the university's HPC cluster, Sapelo2 and assisted with IT-related operations at GACRC

Black Dog Customs

May 2019 - May 2022

Electronics Design / Manufacture

- · designed and implemented numerous electrical automotive products, such as transmission wiring harnesses
- assisted in the installation and maintenance of electrical component in dozens of vehicles

Education

Georgia Institute of Technology

January 2023 - Present

B.S. Computer Science

- Concentration: Intelligence and Systems Architecture
- Coursework: Computer Organization and Programming, Systems and Networks, Perception and Robotics Multivariable Calculus, Linear Algebra
- Extracurricular: Phi Gamma Delta Fraternity

University of Georgia

August 2021 - December 2022

B.S. Computer Science

- Coursework: Differential Calculus, Data Structures and Algorithms, Discrete Math, Automata and Complexity
- Extracurricular: UGAHacks7, Girls Who Code

Skills

Languages: Python, TypeScript/JavaScript, Java, C++, C, Rust, Go, Bash, SQL, HTML5, CSS3 Libraries/Frameworks: Django, Fiber, React.js, Next.js OpenCV, NumPy, Selenium, OpenGL, WebGL General: UI, Git, Linux, Unix, Make, Microsoft Power Suite, Adobe Suite, Data Analysis, Data Visualization