May Tusek

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Work Experience

Staff Engineer   February 2023 — Present
Twenty Ideas   *Eugene, OR*

- Led architecture and implementation of major features for at-scale cloud platform.
- Architected, implemented, and communicated technical designs to clients and stakeholders.
- Supported and empowered my team as technical lead by distilling infrastructural and project knowledge alongside mentorship.
- Developed internal AI / ML products with BERT and Sagemaker for multi-language text classification and generation.
- Built and deployed RAG and RAR agent pipelines utilizing Elasticsearch, Langchain, Neo4j, and Amazon Bedrock.

Software Engineer, Compilers   November 2022 — February 2023
Fundament Software   *Remote, OR*

- Worked on the Scopes compiler.
- Wrote a production grade JSON parser, standard libraries, and frameworks.

Software Engineer, Application Development   January 2022 — November 2022
Glimmertech   *Eugene, OR*

- Built 3D and VR applications using Unity, C#, and OpenXR.
- Developed scalable infrastructure with Firebase.
- Created modern and concise user driven forms supporting various input devices.

Software Engineer & Database Administrator   December 2019 — September 2020
B & R Autowrecking   *Eugene, OR*

- Created applications to handle billing and processing of millions of inventory items.
- Optimized out a manual process with a 10x increase in efficiency.
- Built internal tooling in Rust and Python.

Projects

Bfcompile, Rust (github.com/queercat/bfcompile)

- Blazingly fast parser, bytecode compiler, and virtual machine written for an esolang in Rust.

Cerberus, JavaScript, TypeScript, Node, Elixir, Phoenix, PostgreSQL (github.com/queercat/cerberus)

- Built a fullstack filestorage application using a React frontend, and Phoenix backend.
- Full E2E encryption and passwordless authentication with SRP for 0-knowledge proofs.

Lua Parser, JavaScript, TypeScript, Node (git.moon.horse/mayo/jlua, moon.horse/tools/lua-parser)

- A working Lua parser in TypeScript.
- Hand written lexer and recursive descent parser.

CelestAI, TypeScript, JavaScript, Node, Python, GPT-3, OpenAI (github.com/queercat/CelestAI-Chat)

- A GPT 3.5 powered LLM finetuned and built with a role-actor model.
- Built a novel data generation pipeline with a personality "card" oriented actor system.

Skills and Awards

- **Programming Languages**: Python, JavaScript, Java, Go, C++, SQL, C#, Bash, Rust, HTML / CSS, Ocaml, Elixir, Ruby, Lua, C, TypeScript, SQL
- **Technologies**: Express.js, Jest, Vitest, jQuery, React, Next.js, Flask, Vue, Unity, Firebase, Docker, Git, GitHub, BERT, AI / ML, Elasticsearch, Neo4j, Langchain, Sagemaker, Compilers, Websockets, Webassembly, Phoenix, Ruby on Rails