Kade Samson

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Position Goals

I am looking for a full-time software engineering position with immediate availability; open to remote, hybrid, or on-site opportunities. Passionate about low-level systems programming, graphics/compute engineering, and cybersecurity.

Skills & Technologies

Languages | *Most Relevant → Least Relevant*

- **C/C++** → 6 years' experience using Vulkan, OpenGL, GLM, GLFW, SDL, POSIX, KFR, & JUCE.
- **Rust/Golang** → 2 years' experience using Bevy & wgpu.
- **Python** → 3 years' experience using PyTorch, Pandas, Scikit-Learn, Numpy, & Matplotlib.
- **JavaScript/TypeScript** → 3 years' experience using JQuery, MongoDB/Mongoose, & Node.js.
- **Java/Kotlin** → 6 years' experience using LWJGL & Android Studio.
- **MySQL** → 2 years' experience.
- **R/Scheme/Prolog/Ada** → 1 years' experience using ggplot, tidyverse, & shinyr.
- **HTML5/CSS3/PHP** → 8 years' experience using W3.CSS.

Technologies | *Most Relevant → Least Relevant*

- **Vulkan/OpenGL** → 3 years' experience using GLSL, GLM, GLFW, & FreeType.
- **AI/ML Libraries** → 2 years' experience using Pytorch, Pandas, Scikit-Learn, Numpy, & Matplotlib.
- **Networking** → 4 years' experience with AWS Stack, XAMPP Apache, MariaDB, MySQL, & MongoDB.

Notable Projects

JuiceBox | *Real-Time PIC/FLIP Fluid Simulation Written in Rust* Sept. 2023 – June 2024

- Hybrid Eulerian/Lagrangian fluid simulation using an efficient spatial lookup table and batched sprite rendering.
- Won best computer science oral presentation at Seattle Pacific University's 2024 Erickson Conference.

Westy | *Forward+ Rendering Engine Written in C/OpenGL/Vulkan* July 2021 – Sept. 2023

- Originally written in OpenGL, ported to Vulkan in 2022 for increased performance and pipeline control.
- Supports a forward+ rendering pipeline, the Blinn-Phong lighting model, normal mapping, & .GLB/.glTF meshes.

Dynamic C Array | *VLA Management System Written in C* Sept. 2023

- Designed to allow the user to efficiently store, sort, & search data blocks of any size in C.
- Natively supports quick, heap, & insertion sorts, as well as binary searches.

Education

Bachelor of Science | Computer Science | *Seattle Pacific University* Sept. 2021 – June 2024

- **A** → Algorithm Design & Analysis, Computer Architecture, Software Engineering, Systems Design
- **A-** → Operating Systems, Cybersecurity Engineering, Machine Learning, Discrete Math for Comp. Sci.
- **B+** → Data Structures I/II, Linear Algebra, Physics for Engineering I/II/III
- **B** → Calculus I/II/III, Statistics for Comp. Sci., Concepts in Programming Languages

Associate of Science | Computer Science | *Highline Community College* Sept. 2019 – June 2021

- **A** → Java Programming, Python Programming

Achievements & Certifications

Top Computer Science Oral Presentation | *Seattle Pacific University Erickson Conference* May 2024
C & Python Programming Top 30% Skill Assessment | *LinkedIn* Feb. 2023

Employment History

Real-Time Software Engineering Intern | *DomainTools* June 2024 – July 2024