Faraz Vahedi

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open source

contract

full-time

Jan. 2021 - Present

Nov. 2023 - Present

Nov. 2023 - Present

OVERVIEW __

Senior Software Engineer specialising in systems programming, operating systems, and site reliability engineering. Core expertise in C, C++, Rust and Go, with deep knowledge of UNIX systems, particularly FreeBSD. Active contributor to open source projects including FreeBSD, with strong focus on performance optimisation, systems architecture, security, and reliable software design. Aspiring to contribute to international standard committees (WG14/WG21) while advancing open source technologies.

SKILLS ____

Systems programmer and site reliability engineer with proven expertise in operating systems, distributed systems, and low-level software development. Strong focus on performance, security, reliability, and scalability.

- Expert in C, and proficient in C++, Rust, and Go programming languages, with deep understanding of systems programming and low-level development
- Adept with FreeBSD and other UNIX-like operating systems including OpenBSD, illumos, Linux, and macOS
- Experienced in vulnerability assessment and implementing secure coding practices
- Proficient in high-performance socket programming, IPC mechanisms, event notification mechanisms, and concurrency
- Skilled in designing and implementing reliable distributed systems and scalable infrastructure
- Accomplished in CI/CD automation, containerisation, orchestration, and infrastructure as code (IaC)
- Masterful in systems optimisation, performance tuning, and reliability engineering

EMPLOYMENT HISTORY

FreeBSD Project

Src and Ports Contributor

- Contribute to the base system focusing on code correctness, performance optimisation, and security
- Contribute to documentation and manpages to improve user experience and technical clarity
- Maintain and contribute to several ports

SkunkWerks GmbH

Software Engineer

• Developing a secure, customisable, and high-performance CI/CD platform from the ground up

OMPFinex

Software Engineer, Site Reliability Engineer

- Contributing to system architecture and infrastructure design
- . Developing blockchain transaction monitoring systems in Go and Rust
- Managing multi-zone Kubernetes clusters for high availability infrastructure
- Developing critical system utilities for operational efficiency
- Performing code reviews and parttaking in software architecture discussions
- . Participating in on-call rotation to ensure 24/7 system reliability

illuria Security, Inc. Software Engineer, Site Reliability Engineer

full-time Jan. 2022 - Jun. 2023

- Led infrastructure and release engineering, focusing on system scalability and reliability
- . Developed automated FreeBSD distribution system and custom package repository $% \mathcal{A}$
- Built system utilities and monitoring tools using Rust, C, and DTrace
- . Implemented comprehensive CI/CD pipelines and testing infrastructure
- Optimised large-scale FreeBSD jail deployments and updates

Khallagh Borhan, Inc.

Software Engineer

full-time Mar. 2021 - May. 2021

Jan. 2019 - Feb. 2021

Sept. 2016 - Dec. 2018

- . Designed and implemented high-performance DDoS protection system using $\mathrm{C}{++}$
- Developed network monitoring solution using Berkeley Packet Filter and Netmap in C
- Optimised system performance while maintaining reliability and security

Software Engineer, Site Reliability Engineer

- . Architected and implemented company's PaaS solution
- Developed Kubernetes cluster management tools
- Reduced deployment times through CI/CD optimisation

System Architect, Site Reliability Engineer

- Improved streaming platform performance by 80% through infrastructure optimisation and complete redesign
- . Resolved critical memory leaks, reducing memory usage by 75%
- Implemented container-based virtualisation and distributed storage solutions
- Contributed to company's IaaS solution and debugging critical system issues
- Contributed to the internal CDN solution and its implementation

Bidopin full-time DevOps Engineer Dec. 2017 - Mar. 2019 . Designed high-availability infrastructure using FreeBSD jails Optimised ZFS storage systems with deduplication and tiered caching

• Implemented automated deployment pipelines and backup systems

VOLUNTEER WORK _

- Organised Iran BSD User Group (IRBUG) (April 2019 January 2021)
- . Translated HTTP3-Explained to Persian