Jefferson Chien

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Professional Summary

Passion driven and detail oriented Software Engineer with specialized learning in operating systems, distributed systems, network systems, and embedded systems. Proven track record in optimizing systems, enhancing operational efficiency, and driving infrastructure improvements. Demonstrated expertise in leading complex projects, from concept to implementation, with a focus on OS development and distributed systems. Possesses a Master of Science in Computer Science and a Bachelor of Science in Computer Engineering.

TECHNICAL SKILLS

- Languages: C, C++, Python, Golang, Rust
- Technologies: Linux, Docker, Git, GDB, Valgrind, Kubernetes, Wireshark, Jenkins, Splunk, Wavefront, ElasticStack, Terraform, ArgoCD, AWS
- Specializations: Operating Systems, Network Systems, Architecture, Distributed Systems

EXPERIENCE

• Intuit Inc. San Diego, CA

Software Engineer I

Jun 2023 - Present

- Operation Optimization:
 - * Created a domain specific language for the team's DevOps automation tool and implemented its compiler, reducing script generation time by over 90%.
 - * Implemented a Golang based server with caching for low latency API calls.
- \circ Infrastructure Optimization:
 - * Migrated level 7/4 balancers to level 4, enhancing scalability and latency.
 - * Assisted in containerizing the infrastructure environment, reducing deployment time by 9x.

 $Software\ Engineer\ Intern$

Jun 2022 - Sep 2022

- o Operation Observability:
 - * Developed a cloud based operational insight data pipeline on AWS.

• Trustthink LLC.

Software Engineer Intern

San Diego, CA

May 2020 - Dec 2021

- ∘ **R&D**:
 - * Developed a high performance C client to interface seamlessly with KIP, an encryption acceleration FPGA for DARPAS CHARIOT initiative. Enhanced system capabilities by efficiently collecting and publishing data to a locally hosted MQTT broker via wireless connection using Python.
 - * Collaborated with Leidos on a Blockchain integration initiative for IoT Autonomous Logistics Operations. Developed object recognition, managed IoT sensor data, integrated cloud based Ethereum smart contract APIs, and implemented GPS geolocation tracking using Python.
 - * Authored smart contracts to demonstrate the application of Blockchain on logistic transactions.
- o Security:
 - * Developed a SIEM system using ElasticStack to enhance network security and observability

• University of California, San Diego

San Diego, CA

Teaching Assistant

Mar 2020 - Mar 2023

o Operating Systems: C. Java, Process, Scheduling, Synchronization, Memory Management, File Systems, IPC, Protection

EDUCATION

• University of California, San Diego

San Diego, CA

Master of Science in Computer Science

Sep 2021 - Mar 2023

• University of California, San Diego

Sep 2017 - Jun 2021

San Diego, CA

Bachelor of Science in Computer Engineering

PROJECTS

- Sato%: Designed and implemented dynamic paging mechanisms on an educational OS to optimize memory access performance.
- SurfStore: Implemented a fault tolerant distributed file store using Golang, Protocol Buffer, and Raft Protocol.
- JasmineMQ%: Contributed to the development of JasmineMQ, a distributed message queue designed for enhanced efficiency in IoT devices.