

Kord Boniadi

[LinkedIn](#)[\(949\) 485-0398](tel:(949)485-0398)kboniadi.github.iokboniadi@yahoo.com[Github](#)

SKILLS

Languages: (proficient): Java, Golang, C#, C++, Python, JavaScript, HTML/CSS (familiar): Swift, TypeScript, SQL

Tools/Frameworks: (proficient): gRPC, Protobuf, Kafka, Kubernetes, Docker, Presto, AWS(S3, Lambda, DynamoDB), Flask, React.js, Angular, Blazor, React Native, RDBMS, NoSQL (familiar): Redis, RabbitMQ, Jenkins, ClickHouse

EXPERIENCE

Software Engineer | [Tesla Inc.](#)

May 2023 – Present

- Designed and implemented scalable, distributed software solutions to optimize Tesla's manufacturing processes, achieving a 30% increase in factory throughput.
- Implemented comprehensive monitoring solutions to proactively detect and address system anomalies, significantly minimizing the risk of production delays.
- Second highest contributor on our core services distributed system, responsible for transaction routing from factory systems to all downstream systems with a required 100% uptime.
- Developed a CDC pipeline service to automate onboarding one-to-many database replication schemas.
- Optimized runtime performance of various applications by refining Docker build and deployment scripts.
- Significantly enhanced database query resolution by 100x through data migration to a Data Warehouse and implementation of optimized schema/architecture featuring materialized views, database replicas, and sharding.
- Leveraged knowledge in Golang, C#, Kubernetes, Docker, Kafka, gRPC, Protobuf, Presto, ClickHouse, RDBMS

Software Engineer | [Kible Inc.](#)

Jun. 2019 – May 2023

Ultra-low-latency cloud browser technology

- Reduced cloud browser latency by 2ms by optimizing H.264 encoding/decoding algorithms, implementing zero-copy frame buffer transfer over TCP, and refactoring the web player with C++ compiled using Emscripten.
- Designed and led the re-architecture of a Virtual Desktop Infrastructure (VDI) backend, migrating from VM instances to an ephemeral, data-decoupled architecture on Kubernetes, enhancing scalability, reliability, and cost efficiency for streaming applications.
- Enhanced service-to-service communication latency and efficiency by migrating APIs to gRPC and Protobuf, improving legacy endpoints and developing new features in Golang.
- Developed performance analysis tools for video processing pipelines, enabling better tuning and resource optimization across the stack.
- Implemented UI components for the main website's purchasing and user authentication pages.
- Leveraged knowledge in C++, Golang, gRPC, Protobuf, Docker, Kubernetes, [Ultralight](#), JavaScript, MongoDB

Software Engineer (volunteer) | [Community for Global Innovation](#)

Sep. 2022 – Mar. 2023

- Created an iOS app using React Native to connect college students with free legal services.
- Designed and developed a server-less API and Web App backend using Flask hosted using AWS Lambda.
- Implemented caching using Redis to improve latency and performance of frequently pinged API endpoints.
- Stored and managed data using DynamoDB to maximize query speeds and to keep with a server-less design.
- Leveraged knowledge in Python, JavaScript, AWS(S3, Lambda, DynamoDB), Docker, Redis, Flask, React Native

Software Engineer Intern | [Apple Inc.](#)

Jun. 2022 – Sept. 2022

- Spearheaded the development of a next generation web app for R&D teams to improve data access.
- Integrated new and legacy API's to ensure a seamless migration from existing services.
- Improved page load times by nearly 30% by optimizing asset caching mechanisms and pre-rendering content.
- Collaborated with both software and hardware engineers across multiple teams.
- Leveraged knowledge in Java, JavaScript, Swift, HTML/CSS, REST API, RabbitMQ

PROJECTS

Search Engine

- Developed a Python based Web search engine from the ground up that is capable of handling tens of thousands of Web pages, under harsh operational constraints and having a query response time under 300ms.
- Achieved constraints by implementing and designing the engine to use an inverted index, vector space model, tf-idf factor, cosine similarity score, MapReduce paradigm and distributed query evaluation.
- Utilized: Python, Flask, MapReduce paradigm, Hadoop

EDUCATION

B.S. in Software Engineering (in-major GPA: 3.94)

University of California Irvine, Irvine, CA