

Kayvan Kazeminejad



Profile Summary

I am an experienced *developer* and *architect* with over 25+ years of experience in a variety of platforms and programming languages including:

Haskell, Rust, PureScript, Scala, NixOS, Plutus, Solidity, C/C++.

I have worked in several industries including:

Blockchain, Banking and Finance, Healthcare, Music, and Video streaming, Entertainment, IoT, Hardware manufacturing, and Military.

I love programming in Haskell.

Contact details

✉ kayvan@q2io.com

☎ +1 415 636 1124

📷 kayvank

in kayvankazeminejad

🏠 San Francisco, CA USA

Technical skills

- Haskell, Rust, PureScript, NixOS, Scala,
- Kubernetes, Helm charts, AWS, GCP, Terraform
- PostgreSQL, Redshift, Big Query, MongoDB, Redis, Apache Spark, Flink, Elasticsearch

Soft skills

- Collaborate effectively with coworkers to reach shared goals
- Resilient, Respectful, and eager to learn new skills

EXPERIENCE

HASKELL DEVELOPER at IOHK (Remote) 2023.09–Present

- ◇ Design and implementation of the PlutusApps Marconi chain-indexer tool. The tool was used by several IOHK teams, including PartnerChains and dJeds teams, improving their productivity by +15%
- ◇ Redesigned Partner-Chain's Trustless Haskell, PureScript, and Plutus smart contracts, improving integration time with non-IOHK blockchains by +12%
- ◇ Haskell and Plutus contribution to the design and implementation of dJed StableCoin, which allowed early release of the StableCoin Pricing-Oracle
- ◇ Contributed to the design and implementation of the Innovations fastBft Consensus Rust platform, which led to the adoption of the fastBft consensus by the Midnight blockchain

HASKELL DEVELOPER at Soostone (Remote). 2021.03–2023.09

- ◇ Contributed to the development of the napkin, a SQL meta-programming environment that accelerates data engineering efforts by +30% across multiple backends (e.g. BigQuery and Redshift)
- ◇ Design and implementation of the OAuth 2.0 flow for the "napkin" project, resulting in a much smoother user experience
- ◇ Contribute to replacing the legacy Monad stack with a Polysemy effect system, resulting in a more maintainable and flexible architecture, hence reducing time to market

SENIOR CONSULTANT at Trucklabs (Remote). 2020.03–2021.02

- ◇ Implemented data ingestion pipelines using Scala and Apache Kafka to stream IoT sensor data into AWS DynamoDB, enabling real-time analytics dashboards for +200 clients
- ◇ Implemented multiple user-facing APIs, including smart-trucks routing, fuel consumption, and ETA estimation. These contributions resulted in reducing the fuel consumption by +15% while increasing driver retention by +30%
- ◇ Scala, Apache Flink, Apache Spark, Elasticsearch, Redshift, DynamoDB, Node.js

SENIOR CONSULTANT at RChain (Remote). 2018.04–2020.03

- ◇ Design and implementation of rSong, an on-chain music dApp that was showcased at MIT-Media-Lab as well as RCon3, the dApp was downloaded several thousand times
- ◇ Contribute to the design and implementation of rSpace, a Scala implementation of Tuple-Space used for RHolant smart-contracts storage layer
- ◇ Scala, Node.js, Python, RHolant smart-contracts, Kubernetes, Helm charts

SENIOR CONSULTANT at Vevo (San Francisco, CA). 2015.11–2018.04

- ◇ Engineered the cloud-based data services enabling Vevo's music recommendation engine to improve user retention by 17%
- ◇ Developed HTTP APIs and several JSON-RPC services using Http4s, providing data services to downstream teams as well as Vevo clients
- ◇ Mentor junior developers
- ◇ Scala, Node.js, Python, Kubernetes, Helm charts, Terraform, AWS Serverless

SENIOR CONSULTANT at Intel(Santa Clara, CA). 2013.09–2015.11

- ◇ Engineered VoD, Video on Demand, workflow for video assets encoding/decoding clusters, resulting in decreased video broadcast time by 39%
- ◇ Contributed to the design and implementation of the VoD encoder/decoder of video assets in C++ to take advantage of the new clusters, decreasing decoding time by +37%
- ◇ Design and implementation of the VoD reporting system, providing real-time status reporting of the transcoders pipeline
- ◇ Scala, C++, Terraform, MongoDB, Cassandra, Elasticsearch, Kafka

CONSULTANT at Various locations 2000-01–2013.09

I worked as a consultant in various industries, including Banking, Finance, Healthcare, Defense, Hardware manufacturing, and Government

EDUCATION

California State University, Sacramento.

1994–1999

Bachelor of Science in Computer Science and Mathematics

CERTIFICATIONS

- ◇ DATABASE ADMINISTRATION, *Northrop Grumman*
- ◇ NETWORK ADMINISTRATION, *Northrop Grumman.*
- ◇ ADVANCED NETWORK PROGRAMMING, *Northrop Grumman.*
- ◇ GAME THEORY, *Coursera.*
- ◇ CRYPTOGRAPHY, *Coursera.*
- ◇ SOLIDITY, *Alchemy.*
- ◇ PLUTUS, *Pioneer program, as well as Plutus Project-Based Learning, PPL.*

HOBBIES

I am an Endurance Athlete, and have completed several IRONMAN