

# 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 11% while increasing driver retention by 27%
- ◇ 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**

- ◇ Design and implementation of 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*