Ravi Shankar

Developer · Engineer · Architect

☑ coder@waffles.space 🏫 https://waffles.space 🕥 quantum-pilot 🛅 Ravi Shankar

[REDACTED] information is available on request

Skills ___

Languages Rust, Python, Go, TypeScript, HTML5, SQL, Swift, Bash, Pinescript

Spoken Languages English, [REDACTED]

Technologies Docker, Kubernetes, VueJS, Git, Unix

Practices Version-controlled, Agile, Test-driven, RESTful, Service-oriented architecture

Experience

Backend Engineer Remote

[Al annotation company - REDACTED]

January, 2023 - Present

- Core contributor for multiple domains from API endpoints and jobs processing to workflows for workforce.
- Wrote a scalable hybrid video transcoder that accepts user videos to generate HLS stream for UI and thumbnail videos for training and prediction.
- Rewrote an old caching layer which greatly improved app performance.

Blockchain Engineer Remote

 $[\ \mathsf{Crypto}\ \mathsf{company}\ \mathsf{-}\ \mathsf{REDACTED}\]$

January, 2022 - October, 2022

- Contributor to bridging C-based Bitcoin system with Rust-based substrate.
- Debugged and squashed bugs in the C/C++ codebase on a weekly basis.

Backend Engineer Remote

[Al annotation startup - REDACTED]

November, 2019 - October, 2021

- Initiated and migrated a number of functionality from Python monolith backend to Golang/Python microservices image processing, authentication/authorization with rate limiting, async jobs processing, etc.
- Implemented/optimized major product features in backend API credit system, long running jobs, video processing, data replication/maintenance, webhooks, etc.
- Added a caching layer for efficiently triggering training/prediction services which gave a performance boost.
- Added webassembly support for frontend to efficiently encode/decode RLE label data from backend API.

Senior Software Engineer

[REDACTED]

[Bioinformatics company - REDACTED]

April - September, 2019

- Initiated and incrementally ported the backend pipelines in Python to Golang.
- Co-authored an analytics engine (in Python and Rust) for monitoring AWS services.
- Creator (and past contributor) to [REDACTED] an open source OpenAPI tooling library [REDACTED].

Cofounder / Engineer Remote

[Cloud provider startup - REDACTED]

October, 2018 - March, 2019

- Built an automated platform-agnostic operator for managing Kubernetes clusters without having to rely on a cloud provider's Kubernetes engine it supports autoscaling nodes on demand, partitioning/attaching/cleaning up disks, creating/managing load balancers and deploying apps using Helm charts without the use of kubectl / helm CLI.
- Aided a client in migrating their apps to Kubernetes clusters (in Azure) using the operator.
- Wrote a tool for automating deployment of internal web apps through CI for review, staging and production.

Full-stack Developer Remote

[Design & Development Studio - REDACTED]

October, 2017 - September, 2018

- Core contributor to building a scalable e-commerce platform (in Swift) backed by CockroachDB and gated by an OAuth2 service for RBAC (in Golang).
- Implemented multiple features (payments, checkout, warehouse management, etc.) for storefront and admin apps (in VueJS) for the e-commerce platform.
- Wrote a bot library for [REDACTED] app in Rust.

Full-stack Developer California, USA

[Blockchain-based product startup - REDACTED]

June - August, 2017

- Contracted for a YC startup (S-17 batch) that developed blockchain-based applications for insurance brokers.
- Wrote backend services for chat, auth and crypto (in Rust), worked on the webapp (TypeScript) and owned deployments in a Kubernetes cluster in Azure.

Backend Developer [REDACTED]

[Bioinformatics company - REDACTED]

January, 2016 - February, 2018

- Wrote utilities in Rust for bulk parallel processing of DNA sequence data in FASTQ, SAM and VCF file formats.
- Wrote a species finder that matches and maps sample DNA data to find known species.
- Wrote a sequence aligner which uses Burrows-Wheeler transform and FM-index to backtrack and map DNA sequences to the human reference genome.

Projects_

Onchain Scanner

quantum-pilot/onchain-scanner

Designer/Developer June - July, 2024

Uses AWS Lambda functions from all regions to fetch OHLC candlesticks of onchain (crypto) tokens in parallel, performs candlestick analysis for potential opportunities and sends Discord notifications.

Ace Away Quantum-pilot/ace-away

Designer/Developer August - September, 2019

3-5 player card game written in Golang and VueJS. Supports multiple live rooms for players.

ASCII Art Generator Quantum-pilot/ascii-art-generator

Designer/Developer

May - July, 2019

Extracts key details from images and generates an ASCII sketch - initially written in Python, later ported to Rust, now running in

pure Webassembly.