Amin Marashi

Senior Software Engineer

Amsterdam, Netherlands · me@amin.codes · +31 6 5740 8572

amin.codes · linkedin.com/in/amin-codes · github.com/aminmarashi

Authorized to work in the EU without sponsorship.

SUMMARY

Senior software engineer with 10+ years building backend and distributed systems, much of it serverless on AWS. I design services that stay fast and reliable as they grow: decoupled, message-driven flows behind thin API layers over independently scalable workers, plus SDKs that other teams build on. Comfortable from architecture down to implementation, with scalability and security designed in rather than bolted on later. On the side I build a serverless platform in Rust with Rust-to-WebAssembly frontends. AWS Certified Solutions Architect – Professional.

EXPERIENCE

Senior Software Engineer · New10 — Oct 2022 – Present

Amsterdam, Netherlands

- Led the deprecation of a bulky core service, splitting it into two smaller services that deploy and scale independently: one for company-data lookup, one that aggregates company information; owned the design, the cross-team rollout, and the engineers building them. The lookup service replaced the direct KVK (Dutch Chamber of Commerce) connection with an in-house ABN AMRO source, **cutting company-data lookup costs by more than half (€100K a year)**.
- Drove the architecture approval and cross-team buy-in to break a monolithic contract service into domain-specific microservices; moved contract generation onto Salesforce (Marketing Cloud) behind a backwards-compatible layer so old and new systems run in parallel during migration, then helped roll it out.
- Drove two company-wide platform changes that product teams build on: **beta publishing** in the internal-package CI/CD pipeline and a **log-anonymization process**.
- Designed integration and end-to-end testing tooling used across services; made a serverless service runnable and testable locally to speed up the inner dev loop.
- Designed a new forbearance offer-type flow in the risk domain, settling its scope across product and engineering, and introduced integration tests to that service.
- Conducted backend-engineer technical interviews; **hosted and presented the company-wide Service Engineering Meetings**.

Stack: TypeScript · Node.js · AWS Lambda · API Gateway · Serverless · Terraform · SNS

Senior Software Engineer · Fashion Cloud — Jun 2021 – Oct 2022

Amsterdam, Netherlands

- Led the re-architecture that fixed a data tool's scalability, decoupling pipeline stages into independently deployed ECS containers and owning the rollout to production.
- Orchestrated async data pipelines with AWS Step Functions and CDK; built and maintained the in-house ETL tool that processed and merged high-volume product data in PostgreSQL, loading the merged result into MongoDB at the final stage.
- Evaluated visual ETL tools for the transformation layer; held on-call ownership of the running pipelines.

Stack: TypeScript · AWS · ECS · Step Functions · CDK · PostgreSQL · MongoDB

DevOps Tech Lead · Deriv.com (formerly Binary.com) — Dec 2019 – Jun 2021

Cyberjaya, Malaysia

- Built a release manager on top of Chef and Slack **coordinating company-wide releases across hundreds of EC2 instances**; led a team of senior PostgreSQL engineers and ran round-the-clock on-call.
- Led the migration of an on-prem BI stack (incl. a 2 TB reporting database) to GCP with minutes of downtime, owning the architecture and cutover; cut GCP spend by thousands of USD/month.
- Automated tagging/release workflows by integrating Trello, GitHub, and Redmine; implemented database security measures and tested point-in-time-recovery (PITR) backups.

Stack: PostgreSQL · AWS · GCP · Docker Swarm · Chef · Airflow

Full Stack Engineer · Deriv.com (formerly Binary.com) Jan 2016 – Dec 2019

Cyberjaya, Malaysia

- Worked across a distributed, message-driven trading backend: thin WebSocket API layers delegating to RPC workers over Redis queues, handling sub-second price ticks and trades.
- Designed and implemented `@deriv/deriv-api`, a reactive SDK over the trading WebSocket API, plus its documentation, **used across all of the company's front-end apps**.
- Proposed and built Deriv Bot, a visual auto-trading platform (Google Blockly); maintained its JavaScript-interpreter sandbox npm package.
- Wrote a Perl integration/load-testing framework (IO::Async, Future) and a streaming WebSocket-to-S3 uploader for KYC documents.
- Built the most successful front-end trading app on the WebSocket API (generating millions in annual revenue); briefly served as DBA (2019), delivering DB hardening, replica routing, and a 5× faster integration-test suite.

Stack: Perl JavaScript WebSocket Redis PostgreSQL AWS

Full Stack Engineer · Freelance / Self-employed Mar 2012 – Jan 2016

Remote

- Built a D3.js dashboard visualizing RADIUS authentication logs streamed via DynamoDB Streams and AWS Lambda (Eleven Wireless).
- Developed AngularJS dashboards on Django/Flask REST APIs, documented with Swagger; implemented an IETF draft for IPv6 headers in the FreeBSD kernel (C).

SELECTED PROJECTS

- **Game-creation platform** (self-built product): a distributed, serverless system on AWS where published games run behind API Gateway with Rust Lambda backends and DynamoDB storage, and frontends are compiled from Rust to WebAssembly.
- **Lit Feed**, a distributed feed-reader: a Vercel full-stack frontend over decoupled backend services, a MongoDB Atlas worker system that refreshes feeds asynchronously, and a Python engine that classifies articles async.
- cerebro: orchestrator that drives Claude and Codex sub-agents through a plan, execute, and independent-review loop to a verified, merge-ready pull request; learns durable preferences across sessions and improves itself by mining its own run traces.
- gymnasium: a personal "university" that discovers and ranks recent GenAI research papers from major labs by author prominence.

EDUCATION & CERTIFICATIONS

Education. B.Sc. Computer Engineering, Shiraz University (2009–2014) **Cloud DevOps Engineer Nanodegree**, Udacity (2020)

Certifications. AWS Certified Solutions Architect – Professional (2025) AWS Certified Solutions Architect – Associate (2024) Domain-Driven Design (DDD), O'Reilly (2024) AWS Certified Developer – Associate (2022)

SKILLS

Languages	TypeScript, JavaScript, Rust, WebAssembly (WASM), Python, Perl, SQL, Bash
Distributed	Message-driven / event-driven & async architecture, decoupled & independently scalable services, REST & WebSocket APIs, API design, low-latency / time-sensitive systems
Cloud / Infra	AWS (Solutions Architect – Professional): Lambda, API Gateway, DynamoDB, Step Functions, SNS, ECS/Fargate, CloudFormation/CDK · Serverless Framework, Terraform, Docker, Kubernetes, GCP
Data	PostgreSQL, DynamoDB, Redis, MongoDB, data pipelines / ETL, DDD
Platform / quality	SDKs & platform tooling, CI/CD, infrastructure as code, integration & E2E testing, release engineering, observability, on-call/SRE
Languages (human)	English (professional), Persian (native), Dutch (B2)