Amin Marashi

Senior Software Engineer · Data / ETL

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Authorized to work in the EU without sponsorship.

SUMMARY

Senior engineer with 10+ years building data pipelines, the databases under them, and the cloud infrastructure around them. I build ETL that processes, merges, and loads high-volume data across PostgreSQL and MongoDB, orchestrate it on AWS (Step Functions, CDK) and Airflow, and keep the databases healthy: backups and point-in-time recovery, replicas, hardening, and query performance. 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, purpose-built services and owning the design, the cross-team rollout, and the engineers building them. One 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)**.
- Broke a monolithic contract service into domain-specific microservices, winning architecture approval and cross-team buy-in; 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.
- Designed integration and end-to-end testing tooling across services; hardened API-server middleware with stronger request/response validation.
- Drove two company-wide changes: **beta publishing** in the internal-package CI/CD pipeline and a **log-anonymization process**.

Stack: TypeScript , Node.js , AWS , Serverless , Fargate , Datadog

Senior Software Engineer · Fashion Cloud Jun 2021 – Oct 2022

Amsterdam, Netherlands

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

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

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

Cyberjaya, Malaysia

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

Stack: PostgreSQL , GCP , BigQuery , Metabase , Airflow , PITR backups , Chef

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

Cyberjaya, Malaysia

- Briefly served as Database Administrator (2019): DB hardening, replica routing, and a 5x faster integration-test suite.
- Wrote a Perl integration/load-testing framework (IO::Async, Future) and a streaming WebSocket-to-S3 uploader for KYC documents.
- 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 abstraction over the trading WebSocket API, plus its documentation, **used across all of the company's front-end apps**.
- Built the most successful front-end trading app on the WebSocket API (generating millions in annual revenue) and migrated the legacy site to a modern JS stack (Babel + React).

Stack: PostgreSQL , Redis , Perl , JavaScript , WebSocket , AWS

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

Remote

- Built a monitoring dashboard for AWS DynamoDB Streams (AngularJS, D3.js).
- Built a RESTful API in Flask documented with Swagger (Python); high-performance mobile charts (AngularJS, Chart.js, Ionic); cross-platform mobile apps in Python (Kivy).
- Implemented an IETF draft in the FreeBSD kernel (C); web application development for SkyRadar and Eleven Wireless.

System Administrator · Shiraz University Sep 2010 – May 2012

Shiraz, Iran

- Linux administrator for the CSE department; managed course-management and AD servers, and built a UI to orchestrate virtual PCs with importable snapshots.

SELECTED PROJECTS

- Lit Feed: a distributed feed-reader. A MongoDB Atlas-backed worker system that asynchronously refreshes articles and feeds, and a Python engine that classifies articles async, behind a Vercel full-stack frontend.
- gymnasium: a personal "university" that discovers and ranks recent GenAI research papers from major labs; a source-agnostic pipeline (OpenAlex, arXiv) that unions and dedups results.

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

Data / Databases	PostgreSQL, MongoDB, SQL, ETL / data pipelines, Redis, DynamoDB, PITR backups, replica routing, DB hardening, query performance
Orchestration / BI	AWS Step Functions, CDK, Lambda, ECS/Fargate, Airflow, BigQuery, Metabase
Languages	TypeScript, JavaScript, Python, Perl, SQL, Bash
Cloud / Infra	AWS (Solutions Architect – Professional), Docker, Kubernetes, GCP
Practices	CI/CD, integration & E2E testing, release engineering, observability, on-call/SRE
Languages (human)	English (professional), Persian (native), Dutch (B2)