Shaun Taheri

Distributed Systems Engineer

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 taheris
in taheris

Skills

Architecture — Leading large-scale distributed systems projects from conception to delivery.

Language — Production experience across a range of languages and paradigms, specializing in building high-performance backends in Rust.

Infrastructure — Extensive operational experience with high-volume message brokers plus a range of relational, non-relational and distributed databases.

Experience

Jan 2019 – Dec 2022

Lead Backend Engineer, *Kraken Digital Asset Exchange*, Remote

- Ported the existing backend from PHP to Rust, while adding new features and defining the standards for new Rust services.
- Design and implementation of a risk-engine to score streams of real-time events, identifying potential account takeovers and preventing fraudulent transactions.
- Led the core backend transition to an event-driven architecture, replacing RPC calls between services while supporting backwards and forwards compatible changes.

keywords — crypto, rust, event-driven architecture, team lead, kafka, nomad, protobuf

Mar 2016 – Dec 2018

Senior Developer, *Advanced Telematic Systems*, Berlin

- Built an open-source Rust client for securely applying Software-Over-The-Air updates targeting embedded Linux devices within automotive fleets.
- Wrote an implementation for broadcasting atomic updates to microcontrollers within cars. Presented a demo to HERE Technologies who subsequently acquired the company.
- Introduced Infrastructure as Code utilizing Nix for deterministic deployments within cloud and data-center environments.

keywords — automotive, rust, cryptography, nix, kubernetes, sota, yocto, embedded linux

Nov 2014 – Feb 2016

Senior Developer, *Optiopay*, Berlin

- Design and implementation of a microservice architecture where Event Sourcing was used to build fault-tolerant Go services that could scale to varying workloads.
- Built the continuous delivery pipeline for containerized services across CoreOS machines using a distributed key-value store for service discovery.

keywords — fintech, go, kafka, microservices, event-sourcing, continuous delivery, coreos, etcd

Oct 2013 – Sep 2014 — **Senior Developer**, *LShift*, London

- Development of a typesetting platform to extract content and structure from documents in Google Docs and output template-formatted PDFs for academic publishing.
- Provided consultation on how to manage a heterogeneous set of relational databases across a range of clients. The recipient subsequently acquired the company.
- Built an internal document indexer in Go using ElasticSearch for rapid searching over a large corpus.

keywords — *consulting, java, python, ruby, go, julia, elasticsearch*

Mar 2008 – Sep 2012 — **Data Analyst → Senior Data Analyst**, *Centrica*, Edinburgh

- Analysis of terabyte-scale datasets using SAS to automate billing processes, with an improvement over the previous system from £4m to £7m per annum.
- Built an internal portal for self-service analytics, reducing complex report turnaround time for senior management from days to minutes.
- Manager for a team of data analysts. At the time I was the youngest person to be promoted to a senior position within the office.

keywords — *energy, sas, proc sql, vba, python, javascript, analytics, management*

Education

Sep 2012 – Aug 2013 — **MSc Computer Science**, University College London

- Electives in functional programming and information retrieval.
- One of the top performers with an exam average over 85%.

Sep 2005 – May 2009 — **MA Economics**, University of Edinburgh

- Electives in game theory and econometrics.
- Final year dissertation on approximating optimal play in Texas Hold'em poker.