

Suhail Patel

ABOUT

I'm a software engineer who thrives on engineering and running large scale distributed systems. I have a proven track record in writing scalable software and architecting reliable systems.

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PROFESSIONAL EXPERIENCE

Senior Backend & Platform Engineer

July 2018 – Present

Monzo Bank, London, United Kingdom

Individual Contributor on the Core Platform Squad tasked with leading projects on reliability and innovating to build a platform that scales to 4 million+ customers

- Highlights include leading the scaling operation of Monzo's £20million crowdfunding campaign, rolling out Envoy across the entire fleet, reduced resource usage across our Platform by over 30%
- Leading core library and foundational changes in the Platform to scale to millions of users and hundreds of engineers shipping hundreds of changes across over 1,600+ microservices daily
- Technical authority on investigating deep race conditions and finding/fixing correctness issues across distributed services and systems (such as Etcd Locking and Cassandra)
- Managing and operating the Kubernetes, Envoy and Microservices infrastructure on AWS
- Scaling and improving the core Cassandra cluster to serve over 500,000 queries per second at peak across 600+ keyspaces and 1,700+ tables, far beyond the norm for a typical Cassandra cluster
- Actively taking part in the sourcing/interview/hiring loop, writing and reviewing architectural proposals, advising teams on writing software for scale, delivering internal/external technical talks, mentoring and sponsoring engineers across the organisation
- Leading complex incidents to resolution as part of a specialist on-call/incident response escalation

Lead Software Engineer

October 2014 – July 2018

Citymapper, London, United Kingdom

Core technical lead of the backend engineering team tasked with designing, developing, deploying and managing many of the backend systems which power Citymapper mobile and web applications

- Developing core services including transit / walk routing, real-time transit departures and search
- Building a highly available, token-ring based in-memory HTTP proxy cache used to fetch real-time departures from transit agencies – This cache served tens of thousands of queries per second
- Leading Site Reliability, AWS infrastructure and Platform operations (including building and deploying tools and infrastructure for metrics, logging and analysis)
- Building and deploying systems to scale out to 40 cities and millions of users

Software Engineer / iOS & Android Developer

July 2010 – October 2014

OnApp (previously UK2), London, United Kingdom

- Design, Development, Testing and Deployment of the core iOS app and the Android app
- Development of the Cloud.net Federated Virtual Server Marketplace

EDUCATION

BSc (Hons) Computer Science

September 2010 – July 2013

University of Birmingham, Birmingham, United Kingdom

- First Class Degree with Honours

PROGRAMMING

Confident in Python and Go

Passing knowledge of Objective-C, Java, Ruby, Javascript, SQL

Able to grasp new programming languages, frameworks, systems and APIs rapidly

SOFTWARE

Kubernetes, Amazon Web Services (EC2/S3/RDS + much more), Envoy, Prometheus, NSQ, Etcd, Cassandra, Linux, PostgreSQL, Git, Docker, Terraform

SPEAKING

QCon London (Mar 2019) - Scaling for the Known Unknown

SRECon EMEA (Oct 2019) - Eventually Consistent Service Discovery

AWS Re:Invent (Dec 2019) - Building a Bank on Amazon Web Services (AWS)

QCon London (Mar 2020) - Modern Banking in 1,500 Microservices

Meetups include DevOps Exchange, Cloud Native Paris, London Gophers