Simon Rolfmore

An experienced, hands-on technical manager with proven leadership in high-scale software. I have delivered global SaaS platforms serving millions of users and billions of requests per day, built highly distributed IoT systems, and managed reliable, enterprise-grade compliant services used across the world.

I have deep experience in cloud-native and serverless technologies, using advanced observability techniques to optimise for performance, reliability, and cost-efficiency.

Experience

Principal Architect, Brunswick Corporation January 2023 - September 2024

Returning to the new owners of Navico, I had a wider remit to focus on hands-on organisation-wide system architecture and cross-team collaboration, including designing and supervising the build of PKI, device management, identity, and attestation for a new hardware platform, defining and growing our service offering and build/run strategies to Brunswick, and helping teams with the more complex compliance, security, and observability concerns that come with a larger organisation and an enterprise-focused IT department.

I was the software and OS group's security architecture lead, taking point on global legal compliance, safe over-the-air update processes, prototyping and building new data sync protocols for implementation on 6 platforms with over 250 engineers, and leading Brunswick's technical response to UK PSTI legislation.

Career break, at home in Madeira

September - December 2022

A 4 month break from work, to do a load of DIY, enjoy the beautiful place I live, relax, and recharge.

Principal Software Engineer, Microsoft

March - September 2022

Working in the core access control team for Azure DevOps, I quickly picked up a complex, 15-year-old system handling hundreds of billions of requests per month. Within 3 months, I had identified the root cause of a core performance issue responsible for several outages, and proposed, designed, and implemented a fix to a complex group membership evaluation system that had not been addressed for over 5 years.

I mentored 4 junior staff members, participated in hiring calls, advocated for substantial architectural improvements, and worked with other principal-level engineers on the product's "extended leadership team".

Cloud Engineering Lead, Navico

September 2018 - March 2022

I established, hired, and lead Navico's Connected Services team, the first in the company to foster a culture of test-driven development, continuous improvement, full service ownership, and openness. In 3 years, we built an highly distributed, event-driven IoT data platform capable of scaling to hundreds of thousands of devices, a single account platform for all of our apps, sites, and brands with over 1.5m users (250k MAU), and, and a content delivery ecosystem serving over 700m requests per month. We maintained a minimum 99.9% SLA, delivered to customers in 200 countries worldwide.

As a small team, we created dozens of services with a serverless-first, cloud-native architecture, and the company's first continuous delivery cycle, which combines build, deployment, reliability, and full-system observability through detailed performance metrics and alerting prior to OpenTelemetry standardisation.

Reporting to the CTO of a \$1 billion business, my role was to enable the team to collectively do our best work, acting as a sounding board, quality bar, mentor, and hands-on engineer. I collaboratively guide team decision-making from system architecture and clarifying requirements to code and process review, facilitating productive conversations with our internal and external stakeholders. I also had overall responsibility for security and privacy across a development organisation of over 150 people.

Cloud Solution Architect, Microsoft

January 2016 - September 2018

Working with a handful of companies, I assisted in the architecture of systems utilising the full spectrum of Azure infrastructure and platform services. I educated people from the C-suite to on-the-ground engineering teams, building custom workshops, proof of concept demos, presentations, and hands-on lab sessions to provide clear guidance on current practices and new technologies.

I was recognised as the team's subject matter expert on high-scale web deployments, Cosmos DB, Azure SQL DB, Azure AD app authentication, and Azure Search, delivering team-wide "drop-in clinics" for application development help and advice to over 100 other solution architects.

Development Lead, Cube52 / P3

June 2015 - January 2016

I lead the development of P3: Cube52's "single pane of glass" platform for managing cloud estates across public, private, and on-premises (P3) environments, starting with Microsoft Azure and Azure Pack. P3 was a Bootstrap-driven responsive ASP.NET MVC / Web API application, using Azure Active Directory for authentication, and Redis for caching and coherence.

Long-running tasks were serviced by a flexible, generic job engine developed in-house with worker roles using Azure Service Bus and DocumentDB for communicating and storing progress. I built tools to allow the development team to iterate more simply on specific functionality, abstracting the job handling semantics and asynchronous workload.

I mentored and grew the team, improving code and process quality as the system moved from a proof of concept towards a live, production service.

Lead Application Developer, Pottermore

November 2013 - June 2015

I lead a new team to replace a Java-based eCommerce application used by over 1.5m people and developed by a third-party, bringing expertise in-house while substantially reducing operating and deployment costs from over \$300k to \$5k per month and leading to a step change in shop profitability.

I conducted code reviews and worked with the team to improve code quality adhering to SOLID principles, with unit and integration testing in NUnit and Moq. I implemented the majority of the application's Azure integration, reliability, insight, and scalability systems through Managed Cache, SQL Server 2012, Azure SQL DB, Web and Worker Roles and Kibana. I built integrations with our in-house digital asset management system to drive the store catalogue, eliminating an error-prone and time-consuming manual process.

I built new features and re-architected existing systems for higher flexibility and efficiency for over 14m users of pottermore.com, leveraging a custom CMS with complex taxonomy and ontology support to provide a highly customised experience for passionate fans of the Harry Potter series.

Earlier roles

Lead Software Engineer, Sodexo
Sole EMEA Software Developer, Aon Hewitt
Software Consultant, Quovidion
IT & Development Manager, Doctors Chambers
Senior Developer/Acting IT Manager, Quantum Marketing Group
Technical Consultant, Sumgai Technology / Full Spectrum IT
Developer / Technical Architect, MMCC Consultants

July 2011 - November 2013
January 2010 - July 2011
March 2009 - January 2010
February 2005 - March 2009
March 2003 - February 2005
May 2002 - March 2003
December 1999 - May 2002

Further details about all roles and education available on LinkedIn or by request.