Simon Rolfmore

In over 20 years as a software engineer, architect, and technical lead, I have learned that nothing comes close to the sense of achievement and enjoyment I get from helping teams to build complex systems as simply as they can be (but no simpler). I believe that well-crafted software and services, built responsibly, with empathy and care, are a hugely effective "impact multiplier" for their users.

I have built my career from a solid base in software development, moving into technical leadership with an emphasis on education and mentoring, keeping an open mind, a passion for learning from being proven wrong, and Oxford commas.

Experience

Principal Architect, Brunswick Corporation   January 2023 - current

Returning to the new owners of Navico, I am focused more on system-wide architecture problems including PKI for device registration, identity, and attestation management, defining and growing our service offering to the wider group, and helping teams with the deeper compliance and security concerns that come with a larger organisation.

Career break, at home   September - December 2022

I took a 4 month break from work, to do a load of DIY on the house, enjoy the beautiful island I live on, and generally 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 trillions of requests per month. Within 3 months, I had identified the cause of a core performance issue which had caused several outages, and proposed and implemented a fix to a complex group membership evaluation system which 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 "extended leadership team" for the product.

Cloud Services Architect, Navico   September 2018 - March 2022

I helped establish, hired, and now lead Navico's Connected Services team, the first in the company to foster a culture of test-driven development, continuous improvement, service ownership, and openness. In 3 years, we have built a single account platform for all of our apps, sites, and brands with over 750,000 users (250k MAU), and an IoT data processing, API, and content delivery ecosystem serving over 500m requests per month. We maintain a minimum 99.9% SLA, delivered to customers in 200 countries worldwide.

Delivering services using a serverless-first, cloud-native architecture, and the company's first continuous delivery cycle, which combines detailed build, deployment, reliability, and performance metrics and alerting across all of our core features.

Reporting to the CTO of a $1bn business, my role is 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 have recently been given 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, using 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, Azure Search, and delivered team-wide "drop-in clinics" for application development help to over 100 people.

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. 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

My main priority was to lead a new team in replacing a legacy Java-based application developed by a third-party, bringing expertise in house while substantially reducing operating and deployment costs. We produced a new ASP.NET MVC 5 eCommerce system used by over 1.5 million people, hosted on Microsoft Azure. We increased flexibility, performance, and load tolerance, leading to a step change in shop profitability. I conducted code reviews and worked with the team to improve code quality using SOLID principles, unit, and integration testing with NUnit and Moq. I implemented the majority of the application's Azure integration and scalability systems through Managed Cache, SQL Server 2012, Azure SQL DB, Web and Worker Roles.

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

Senior Software Engineer, Sodexo   July 2011 – November 2013

I introduced OO, web development, and MVC concepts to a development team experienced in Oracle PL/SQL and Borland PowerBuilder while creating a new ordering website for the company's multi-store voucher system. Lead development on, architected, and engineered the company's flagship online product, a childcare voucher management system used by over 200,000 people.

I created secure SOAP 1.2 Web Services using Windows Communication Foundation for a Home Office system providing in branch point of sale payment authorisation. I designed and created ASP.NET MVC4/Web API systems to provide all business logic and authentication/authorisation for a new product with a front end developed by a third party.

Solutions Architect, Aon Hewitt   January 2010 – July 2011

My primary role was to expand and improve Aon Hewitt's flagship software, known as Greater Insight – an international multi-tenant platform for benefits and pension management used by tens of thousands of people worldwide. Greater Insight was developed initially using VB.NET, ASP.NET, and LINQ to SQL, transitioning to C# and Entity Framework for ongoing work.

I designed, architected, and developed modules and key systems on the platform, providing consultancy, information, and code reviews to other teams across the world. Recognised as the company's Microsoft SQL Server expert, I gave best-practice recommendations to ensure performance, availability, and security.

Software Consultant, Quovidion   March 2009 – January 2010

I was recruited for a long-term project involving worldwide travel to local offices of a major multinational, integrating document workflow and information extraction technologies to generate output for accounting systems in SAP, SQL Server & Oracle from paper invoices.

IT Manager, Doctors Chambers   February 2005 – March 2009

I established in-house software as a key business differentiator, building a team working to engineering and systems best practices with a hands-on approach to development. I hired, lead, and mentored a team of 6, building web-based applications used by major industry clients, including a clinic booking and report management portal, and a Windows Forms synchronisation framework for a third-party system. I developed Windows Forms and web applications for scanning, barcode recognition, document routing and management, postal address handling, and performance management.

Earlier roles

Senior Developer/Acting IT Manager, Quantum Marketing Group   March 2003 – February 2005

Technical Consultant, Sumgai Technology / Full Spectrum IT   May 2002 – March 2003

Developer / Technical Architect, MMCC Consultants   December 1999 – May 2002

Details available on LinkedIn or by request.

Education   Leighton Park School

A-Levels   Chemistry A | Mathematics B | Physics B | Further Mathematics C

GCSEs   Information Systems A* | Mathematics A* | Chemistry A | English Literature A | French A
              German A | Physics A | Biology B | English Language B | Religious Studies B