

ANDREW MCLACHLAN

PROFILE

- Engineering lead and architect with over 20 years' post-graduate experience
- Over 5 years' experience leading development teams and architecting solutions in Azure
- Proven track record of delivery
- Full stack developer with React JS and .NET
- Experience in Consulting, Construction, Finance, Insurance and Media

KEY SKILLS

Engineering management

Solutions architecture

Agile patterns and practices

PSM-1 Certified Scrum Master

Azure PaaS architecture

C#, .NET 8, ASP.NET Core

TypeScript, ReactJS

GitHub (Repos, Actions, Packages)

Infrastructure-as-code (Bicep / ARM, Pulumi)

Octopus Deploy, TeamCity, Azure DevOps

KEY ACHIEVEMENTS

- Managed delivery of a suite of integrated applications for Laing O'Rourke
- Built a Software Development team of 16 developers
- Designed a cloud-native solutions architecture based on Azure Platform-as-a-Service (PaaS)
- Developed DevOps strategy, automating build, deploy and infrastructure-as-code
- Managed product owners, quality assurance and development teams
- Instituted new development standards and ways of working

EXPERIENCE

Engineering Lead, Willow Inc

July 2023 – Present

Management

- Responsible for three teams, IoT Services, Advanced Analytics and Marketplace across Australia and South Africa
- The teams were broadly responsible for collection and processing of customer data, primarily IoT telemetry, but also service tickets, utility bills etc. The Advanced Analytics team utilised AI (LLMs and Machine Learning) to gain insights into customer data
- Project-managed the migration of all customers onto a new Azure architecture, ensuring the process incurred no loss of data
- Devised and documented the Azure disaster recovery policy
- Worked with customer technical support to create troubleshooting guides, escalation paths and on-call support rostering
- Increased code quality in the team, measured by test coverage, observability metrics and undetected errors

Delivery

- Delivered ActiveControl, a key differentiator for the business that allowed data-derived insights to be actioned directly on the customer's IoT infrastructure
- Delivered an AI chatbot prototype that helped win a contract with a large US retailer
- Architected the next generation public-facing API, based on Azure API Management

Application Development Manager, Laing O'Rourke

May 2019 – June 2023

Delivery

- Worked with business engagement to propose an innovative platform of applications to make significant cost savings and increase the quality and availability of key data to the business. The two key business areas were supply chain management and the construction project lifecycle.
- While the new platform was being delivered, also responsible for development and maintenance of a number of ongoing and legacy applications. This involved careful management of limited resources against competing priorities.
- As part of the successful delivery, formalised the agile approach with Scrum, encouraging the teams to become self-organising and ensuring the processes and tools supported the teams in delivery. The development process was also formalised, including new coding standards and review process.

Leadership

- The software development team was initially only two developers. To facilitate this programme, the team was grown to 16 at its largest, plus dedicated automation testers and product owners.
- Shared our practices and technologies with colleagues in the UK in order to align our approach, as well as define new global standards that lead to the adoption of GitHub and Auth0. Was assigned the global platform owner for GitHub.
- During the transition to a new organisational structure, took on some engineering manager responsibilities, including resourcing, budgeting and vendor negotiations.

Architecture & DevOps

- Responsible for the Architecture of the entire solution, including the technology stack (Azure PaaS, .NET Core, ReactJS) and defining and implementing strategies for Integration, Security, High Availability and Disaster Recovery in Azure.
- Strong focus on security, including using best practices for secure coding, authentication / authorisation, DevSecOps and least privilege while finding opportunities to integrate with the existing change management process.
- Made significant cost savings in our Azure estate, cleaning up over-scaled and unused resources. Designed an Infrastructure-as-Code strategy to ensure consistency across environments.
- Initially there was very little defined process in terms of DevSecOps. Built out the capability with GitHub, TeamCity and Octopus Deploy, ensuring all code was subject to review, security scanning was in place and limiting production access to a small subset of the team.

PREVIOUS EXPERIENCE

Senior Software Engineer, Tatts Group / Tabcorp (Contract)	Feb 2019 – May 2019
Sitecore Specialist, 4impact (Contract)	Jan 2018 – Dec 2018
Feature Team Lead and Technical Lead, 4impact - RACQ (Contract)	Mar 2014 – Dec 2017
Software Engineer, Queensland Government (DHPW) (Contract)	Jan 2014 - Mar 2014
Software Engineer, Fujitsu Australia Software Technology (Contract)	Apr 2013 - Nov 2013
Software Engineer, SG Fleet (Contract)	Apr 2012 - Apr 2013
Software Engineer, Fairfax Media (Contract)	Oct 2011 - Mar 2012
Senior Web Developer, Carlson Marketing (Contract)	May 2011 - Sep 2011
Software Engineer, Reed Business Information (Contract)	May 2010 - Apr 2011
Technology Consultant and Developer, Chello Publishing (Freelance)	Jan 2010 - Apr 2011
Software Engineer, London Underground (Contract)	Dec 2009 - Apr 2010
Software Engineer, Wildnet Group (Contract)	Sep 2008 - Oct 2009
Senior Software Engineer, Priocept	Dec 2006 - Aug 2008
Developer, Ascent Media Group	Feb 2005 - Dec 2006
Software Engineer, Accenture	Jan 2003 - Jan 2005
Programmer/Web Developer, Zurich Insurance	Sep 2000 - Sep 2001

EDUCATION AND QUALIFICATIONS

- 2021** **Microsoft Certified: Azure Developer Associate**
- 2018** **Professional Scrum Master Level 1 (PSM-1)**
- 2018** **Sitecore 9.0 Certified Platform Associate Developer**
- 2014** **Sitecore Certified .NET Developer**
- 2008** **Microsoft Certified Professional Developer**
Designing and Developing Enterprise Applications for .NET 2.0
- 2007 - 2009** **Microsoft Certified Technology Specialist**
.NET 3.5 Windows Communication Foundation (WCF)
SQL Server 2005 Implementation and Maintenance
.NET 2.0 Distributed Applications Development
.NET 2.0 Web-based Client Development
.NET 2.0 Windows-based Client Development
- 2004** **Sun Certified Business Component Developer (including SCJP 1.4)**
- 2002** **BSc (Hons) Computer Science, Upper Second Class**
University of Portsmouth, accredited by the British Computer Society

REFERENCES

Available on request