

Michael McAllister

SITE RELIABILITY ENGINEER · LINUX ENTHUSIAST

☎ (+61) 410 206 745 | ✉ me@michaelmcallister.org | 📷 michaelmcallister | 🌐 mpmcallister

Summary

Experienced Site Reliability Engineer with over 10 years of proven success designing, implementing, and maintaining critical infrastructure systems that maximise performance, uptime, and security for some of the largest distributed systems in the world.

Skilled in analyzing complex problems, identifying root causes, and delivering effective solutions in fast-paced, high-pressure environments. Strong communication skills with a track record of building collaborative relationships with team members and stakeholders.

Skills

Software Development	Bash, Golang, Protocol Buffers, CI/CD
DevOps	Kubernetes, Prometheus, Grafana, PagerDuty, OpenTelemetry
Systems & Networking	Linux, OSPF/BGP, TCP/IP, Routing & Switching (Juniper MX, Cisco NCS), DNS, SQL (Postgres, MySQL, Cloud Spanner)
Cloud	AWS: EC2, S3, RDS, VPC, Lambda, IAM

Work Experience

Commonwealth Bank of Australia

Sydney, Australia

STAFF SITE RELIABILITY ENGINEER - TECH LEAD

Oct. 2022 - Present

- Transform and uplift the reliability of the bank by applying SRE philosophy, principles, and practices
- Architecture and design of a new observability stack built on Grafana, Mimir and Prometheus
- Responsible for the coaching and professional development for 20+ Engineers
- Long term strategy for SRE across the Bank (3-5 year plan)
- Monitoring, alerting and dashboarding through Grafana, Prometheus, PagerDuty

Teleport

Sydney, Australia

SITE RELIABILITY ENGINEER - TEAM LEAD

Sep. 2021 - Jul. 2022

- Incident management, co-ordination and resolution of operational issues across Kubernetes, and AWS (S3, DynamoDB, IAM)
- Architecture and design of storage and authentication components in a bespoke Kubernetes operator written in Go to support multi-tenancy
- Hiring (interviews, designing the hiring challenge), coaching and staff on professional development
- Various DevRel contributions: Conference talks, booth attendance, demo videos
- Monitoring, alerting and dashboarding through Grafana, Prometheus, PagerDuty

Google

Sydney, Australia

SYSTEM DEVELOPMENT ENGINEER

Jul. 2018 - Aug. 2021

- Responsible for the operational upkeep of a globally distributed CDN (Google Global Cache) operating in over 1,300 cities in more than 200 countries and territories powering products such as YouTube
- Designed and implemented an on-device monitoring solution written in Go for top-of-rack switches that communicates health status via serial output
- Contributed various bug fixes and features for the public facing Google ISP Portal written in Python, JavaScript and SASS
- Designed and implemented a sophisticated rules-based ingestion engine in Go that applies routing, priority and auto-remediation decisions to inbound tickets driven by text based configuration
- Responsible for reporting and metrics (SQL, Dashboarding) of the fleet for metrics such as annualised failure rate for HDDs to ensure a high degree of cache efficiency

Amazon Web Services

Sydney, Australia

SYSTEMS DEVELOPMENT ENGINEER

Jul. 2016 - Jun. 2018

- Scaling, monitoring and fire-fighting the Amazon RDS control plane powering the largest database fleet in the world
- Designed and built a solution in Java to ingest and analyse alarming data to identify operational trends and patterns
- Built supporting tools, including a web application in Python to understand and interpret ingested data both in real time and in automated weekly reports to stakeholders (to the GM level)
- Documented & drove process change that uses this data to influence the cadence and velocity of feature development
- Participate in hiring (100+ interviews) identifying potential in candidates to help fuel Amazon's expansive growth

Amazon Web Services

Sydney, Australia

CLOUD SUPPORT ENGINEER

Apr. 2015 - Jul. 2016

- Subject Matter Expert for EC2 Linux tasked with fleet-wide capacity management, and XEN dom0/hypervisor level troubleshooting
- Offered systems architecture advice and troubleshooting to customers using Amazon Web Services (EC2, Route 53, RDS, IAM, VPC, etc.) as solutions for their projects - focusing on high-availability, fault tolerance, scalability
- Facilitated training sessions for new engineers on AWS EBS (Elastic Block Store), as well as advanced troubleshooting for tenured Engineers

iiNet

Perth, Australia

SYSTEMS ADMINISTRATOR

Aug. 2013 - Mar. 2015

- Part of a 24/7 on call rotation for the infrastructure and supporting services for Australia's #2 ISP (LDAP, DNS, E-Mail, Web Servers)
- Design, implementation and operational support for iiNet's DNS infrastructure (PowerDNS) that supported over 1 million active services across Australia
- Maintain & document disaster recovery plans, policies and procedures

iiNet

Perth, Australia

NETWORK ADMINISTRATOR

Aug. 2012 - Aug. 2013

- Proactive monitoring of the availability & performance of iiNet's key systems and applications, including F5 BIG-IP load balancers, *NIX Servers (Linux, Solaris), NetApp Storage Appliances and Juniper networking equipment
- Physical installation, cabling and configuration of servers, and ADSL DSLAMs
- Incident Response & Post Mortem reviews

Education

Charles Sturt University

Sydney, Australia

GRADUATE CERTIFICATE IN NETWORK AND SYSTEMS ADMINISTRATION

Jan. 2016 - Jan. 2017

TAFE NSW

Sydney, Australia

ADVANCED DIPLOMA IN SYSTEMS DEVELOPMENT

Jan. 2015 - Jan. 2016

Presentations

Conf42 SRE 2022

Sydney, Australia

FOUR GOLDEN SIGNALS: MONITORING THE HEALTH OF YOUR SERVICE

Jun. 2022

- Presented a lightning talk that focuses on the four golden signals of monitoring that serve as a solid foundation for actionable monitoring of the health of a service
- Available on YouTube at: <https://www.youtube.com/watch?v=rZzGr5Zj1KM>

DevOps Talks Conference

Melbourne, Australia

eBPF AS A LINUX TROUBLESHOOTING TOOL

March. 2022

- Presented a technical talk on eBPF and how it can be leveraged to for troubleshooting and root causing software issues on Linux.
- Available online at: https://devops.talksplus.com/archive/2022_melbourne/agenda

AWS CodeHack Sydney

Sydney, Australia

PRESENTER FOR AMAZON SYDNEY HIRING EVENT & COMPETITION

Nov. 2017

- Organizer of a coding event designed to challenge attendees with 3 major prizes for top performers
- Presented an introduction to the role of System Development Engineer, and the culture of AWS to 80+ attendees

AWS Summit Sydney

Sydney, Australia

BOOTH ATTENDANT & BUILDER FOR AMAZON SIMPLE BEER SERVICE

Apr. 2016

- A part of a small team that built an IoT Keggerator for the AWS Sydney Office that sends beer flow data to AWS
- AWS technologies include: S3, API Gateway, Lambda, DynamoDB integrated with a Raspberry Pi & Physical sensors
- Showcased at a booth at the AWS Summit Sydney 2016 to 3,000+ attendees
- See <https://simplebeerservice.com>

Referees

References available upon request.