

# Michael McAllister

SITE RELIABILITY ENGINEER · LINUX ENTHUSIAST

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## 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

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

## Work Experience

### Commonwealth Bank of Australia

Sydney, Australia

PRINCIPAL SITE RELIABILITY ENGINEER - TECH LEAD

Oct. 2022 - Present

- Transform and uplift the reliability of the bank by applying SRE philosophy, principles, and practices
- Lead the architecture, design and implementation 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)
- Deliver presentations on strategy to audiences ranging from 100+ to 1000+ including senior leadership

### 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

Apr. 2015 - 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

## iiNet

SYSTEMS ADMINISTRATOR

Perth, Australia

Jul. 2011 - 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
- Physical installation, cabling and configuration of servers, and ADSL DSLAMs
- Maintain & document disaster recovery plans, policies and procedures
- Incident Response & Post Mortem reviews

## Education

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### Monash University

MASTERS IN COMPUTER SCIENCE

Sydney, Australia

April. 2023 - Present

### Charles Sturt University

GRADUATE CERTIFICATE IN NETWORK AND SYSTEMS ADMINISTRATION

Sydney, Australia

Jan. 2016 - Jan. 2017

## Presentations

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### Conf42 SRE 2022

FOUR GOLDEN SIGNALS: MONITORING THE HEALTH OF YOUR SERVICE

Sydney, Australia

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

EBPF AS A LINUX TROUBLESHOOTING TOOL

Melbourne, Australia

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](https://devops.talksplus.com/archive/2022_melbourne/agenda)

### AWS CodeHack Sydney

PRESENTER FOR AMAZON SYDNEY HIRING EVENT & COMPETITION

Sydney, Australia

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

BOOTH ATTENDANT & BUILDER FOR AMAZON SIMPLE BEER SERVICE

Sydney, Australia

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

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References available upon request.