

Java Ma

Experienced Engineering Manager

(+61) 0406767017 | java.m@cloud-mill.com | github.com/wjjmjh | linkedin.com/in/java-m-864a4b168

I am an Engineering Manager with deep expertise in software, cloud, data, and AI, complemented by strong research and analytical capabilities, proven leadership, and strategic vision. With experience across multiple industries, I excel at stakeholder engagement, shaping tailored solutions, and leading projects from concept through delivery. I am passionate about leading engineering teams by example, staying hands on, designing solutions that turn the impossible into reality, and delivering outcomes that genuinely delight customers while advancing business goals.

EXPERIENCE

Engineering Manager

July 2025 — Present

Accenture

Sydney, Australia

- Commonwealth Bank of Australia: Led an AWS based LLM contract ingestion and agentic querying pipeline leveraging Textract and Bedrock, alongside a high performance billing calculation engine for CBA's Merchant Acquiring Billing platform, applying advanced banking financial models across billions of transactions and 220,000+ merchants.
- Australian Taxation Office: Led the modernisation of the ATO's cloud infrastructure and cloud automation and orchestration platform, leveraging HashiCorp Terraform Enterprise, Vault, Sentinel, Ansible, AWX, VMware vSphere, Azure, and AWS.
- TPG Telecom: Led the technology team to design, architect, and deliver big data analytics solutions on AWS using S3, Iceberg, AWS Glue (Spark), Glue Data Catalog, and Redshift, resulting in a client reported 70% increase in operational efficiency.
- Meat & Livestock Australia: Led the backend engineering team to design and implement a scalable event-driven, data-intensive distributed platform architecture.

Senior | Software, Cloud & AI Engineering

April 2024 — July 2025

V2 AI

Sydney, Australia

- Commonwealth Bank of Australia: Led the design and delivery of an agentic GenAI and LLM powered application providing advanced transactional intelligence and dynamic user personalisation. Directed the development and implementation of core platform capabilities by leveraging AWS services including Bedrock, Lambda, and RDS, while delivering a high performance, responsive frontend using Next.js with infrastructure managed through SST, resulting in a scalable, cloud native solution and an enhanced personalised user experience.
- Woolworths Group: Led the design and delivery of key capabilities for Woolworths' Campaign Manager Platform using React, TypeScript, and Kotlin. Architected a microservices based platform and Kubernetes infrastructure to deliver scalability, high performance, and streamlined CI/CD, while driving technical decisions that enhanced developer experience, system reliability, and operational efficiency.
- Kingfisher: Led the development of full stack features, building a responsive frontend with React and TypeScript and a robust backend in C#. Delivered a seamless user experience through efficient system integration, performance optimisation, and high quality software engineering practices.
- Annica: Led the end to end design, development, and deployment of the Annica Insights platform using Next.js, React, and TypeScript, with seamless integration to Contentful. Modernised the organisation's content strategy by enabling efficient distribution of actionable insights and expanding brand reach and visibility.
- Dossy: Led the integration of real time voice and video conferencing into Dossy's React Native application using the AWS Chime SDK. Led the development of full stack capabilities for the administration platform using Vue.js, TypeScript, and C#, delivering a reliable, high performance solution with an intuitive user experience.
- Sydney Fish Market: Led the deployment of AWS Landing Zone and implementation of AWS Control Tower, establishing a secure and scalable cloud foundation. Architected and delivered infrastructure as code solutions, including enterprise SSO integration, network architecture, subnets, and security configurations, ensuring robust security, governance, and compliance.

Software Engineer

April 2023 — March 2024

AURA

Canberra, Australia

- Main contributor to the Aura Core Platform, responsible for designing and building a robust backend distribution system aligned with product requirements to deliver top-tier services.
- Leveraged cloud technologies on AWS, pushing the boundaries to provide the best possible services. By utilising AWS cloud technologies and IaC, I ensured the delivery of innovative and efficient solutions to meet and exceed project expectations.
- Designed cost-effective, reliable, and secure cloud solutions optimised for computational and storage needs, ensuring optimal performance, scalability, and security.
- Researched and developed AI/ML proof-of-concept solutions tailored to business needs, successfully pitching them to senior leadership to demonstrate strategic value.

Senior Software Engineer

February 2023 — March 2023

Fiskil

Brisbane, Australia

- Led intensive agile sprints to successfully complete the migration of the platform backend from a serverless architecture to a self-managed, highly efficient and robust Kubernetes cluster.
- Designed and implemented a scalable microservices architecture in Go to deliver real-time banking and energy data to end-users.

Platform Engineer

Birdi

July 2022 — February 2023

Sydney, Australia

- Spearheaded full-stack development using React.js and Express.js, overseeing the end-to-end software lifecycle, from requirements gathering to deployment, ensuring robust and user-friendly features through rigorous quality analysis.
- Architected an AWS-based platform infrastructure, utilising Terraform, Drone CI, Skaffold, Helm, Consul, Vault, and PostgreSQL for scalable and efficient operations.
- Developed and delivered highly scalable, event-driven systems by leveraging microservices architecture, seamlessly integrating Docker, Kubernetes, and Redis for optimal performance and reliability.
- Independently designed and implemented a real-time alerting and logging system with TypeScript, Go, and Elasticsearch, streamlining error detection across frontend and backend architectures.
- Developed a computer vision automation bot using Sikuli to implement frontend visual testing and backend functionality testing, enhancing quality assurance and mitigating release risks.

Software Engineer

FLINTpro

June 2021 — June 2022

Canberra, Australia

- Engineered full-stack software solutions for the FLINTpro system using Vue.js, TypeScript, Go, Python, and C++. These efforts ensured seamless alignment with system requirements, architectural designs, and technical specifications, while meeting stringent quality accreditation standards.
- Designed and implemented a groundbreaking visualisation platform for distributed carbon modeling simulations, independently managing both backend and frontend development. The backend incorporated Go, Python, C++, TileDB, Docker, Kubernetes, and GCP, while the frontend utilised TypeScript to integrate GIS and advanced mapping tools.
- Collaborated with leading environmental scientists to translate intricate carbon modeling algorithms into high-performance, efficient, and reliable C++ code.
- Delivered a compelling demonstration of the FLINTpro system's capabilities, emphasizing its real-world applications. This contribution was instrumental in securing the ACT Chief Minister's Export Award in Sustainability.
- Presented the FLINTpro system to venture capital firms, effectively showcasing its advanced capabilities for accurate measurement, reporting, and forecasting of greenhouse gas emissions, positioning it as a trailblazing solution in sustainability technology.

Software Engineer

NetApp Instacluster

November 2020 — June 2021

Canberra, Australia

- Contributed to the development of a SaaS platform using Java, applying technical expertise to deliver scalable and efficient solutions aligned with business objectives.
- Partnered with Cassandra database specialists to execute build, test, DevOps, and maintenance operations for managed Cassandra Database-as-a-Service solution.
- Implemented and deployed Apache Spark using a suite of cloud technologies, including Docker, Kubernetes, Terraform, Jenkins, and Ansible, delivering reliable distributed computing solutions to customers.
- Acted as a key contributor to the Instacluster Terraform provider open-source project, driving development efforts with Go to improve functionality and usability.
- Contributed to the development and refinement of logging and monitoring features for a SaaS product, employing technologies like Scala, Java, Fluentd, and Elasticsearch to ensure system reliability and performance.

Computational Scientist

The Australian National University Computational Bioinformatics Lab

July 2019 — November 2020

Canberra, Australia

- Main contributor and maintainer of Cogent3, a reputable and established Python library for genomic sequence data analysis, funded by ANU & Chan Zuckerberg Initiative; Responsible for the formulation of software architecture, API design, algorithm implementation, and performance optimisation.
- Specialised in performance optimisation through the integration of Cython and Numba, resulting in significantly accelerated algorithmic processing. Further enhanced computational efficiency by implementing parallel computing capabilities, enabling algorithm execution across large-scale computing systems with thousands of processors.
- Collaborated with world-leading biology researchers, served as a computational specialist to enable advanced data simulations; Developed and implemented innovative bioinformatics algorithms to augment research capabilities and drive scientific discoveries.
- Engineered a robust testing pipeline, ensured cross-platform compatibility and software integrity. The pipeline features a full spectrum of tests, including unit tests, regression tests, performance evaluations, and benchmarking, to meet the diverse needs of a global user base.

- Designed and implemented an Enterprise Resource Planning system to streamline divisional business processes, leveraging React.js, TypeScript, Python, and MySQL.
- Designed, architected, and built a graph-based networking web application to enable researchers to collaborate on research projects, leveraging React.js, TypeScript, Java, and PostgreSQL.
- Conducted data mining, wrangling, visualisation, and analysis to deliver precise and actionable reports for division executives and the management board, utilising tools such as TypeScript, Python, R, D3.js, Numpy, and Pandas.
- Applied machine learning technologies, including scikit-learn and TensorFlow, to enhance operational efficiency and support data-driven decision-making.

EDUCATION

Bachelor of Science
The Australian National University
Concentration: Computer Science & Mathematics

2017 — 2020
Canberra, Australia

LEADERSHIP

- Cloud Mill**
github.com/cloud-mill

Apr 2023 - Present
- Pioneering an open-source, cloud-native foundation, driving innovation and redefining the possibilities of cloud technologies.
- Esynz**
esynz.com

Jan 2024 - Jan 2025
- Founded a platform empowering outcome-driven micro consulting anywhere, anytime; by managing every aspect from ideation and design to development, deployment, and growth strategy.
- ANU Rocketry**
anurocketry.com

Dec 2018 - May 2019
- As a founding member, I led the simulation team and played a pivotal role in developing the first generation of rockets.

ACHIEVEMENTS

- Canberra Zero Emissions Transport Hackathon**
Team Lead · Third Place

2020
- Led the tech team in developing a web application that simplifies finding and paying for electric vehicle charging stations, leveraging Esri services.
- GEO week Hackathon**
Team Lead · First Place

2019
- Led the tech team in developing a web application that supports the preservation and sharing of Indigenous knowledge through community engagement.
- Canberra Intelledox Hackfest**
Team Lead · First Place

2018
- Led the tech team in building an intelligent system to modernise ACT Police workflows, developed in collaboration with the Australian Federal Police.

CERTIFICATIONS

Accenture Reinvention with Agentic AI	2026
GCP Professional Cloud Architect	2024
GCP Professional Cloud Developer	2024
Snowflake Sales Professional	2024
Snowflake Technical Sales Professional	2024
AWS Certified Security – Specialty	2024
HashiCorp Certified Terraform Associate	2023
AWS Certified Solutions Architect	2022