

Nathan Long

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CAREER PROFILE

Dynamic and motivated engineer with 3 years of experience in developing and architecting cloud-based solutions within agile environments. Proven skills in Python and C# for microservices development, complemented by hands-on DevOps experience in deploying AWS architectures using automation including IAC and CI/CD. Eager to leverage my expertise in an enterprise setting for continued professional growth and impactful contributions.

PROFESSIONAL EXPERIENCE

Software Data Engineer

October 2022 – Present

ResMed

- Architected and implemented microservices using C# .NET and Python, enhancing app connectivity and security through a hybrid-cloud strategy between AWS and existing enterprise services.
- Designed and deployed scalable and secure APIs using AWS including API Gateway, Lambda, EC2 and S3, employing Terraform for efficient infrastructure management.
- Monitored and maintained cloud infrastructure, utilizing AWS CloudWatch and other monitoring tools to ensure high availability and performance of services.
- Conducted performance tuning and optimization for microservices and APIs, resulting in improved response times and reduced latency in user interactions.
- Conducted security assessments and vulnerability scans on applications, proactively addressing potential threats to maintain compliance and data security.
- Secured multiple platforms including native applications with Okta, enabling robust authentication via OAuth with PKCE to ensure data integrity and user protection.
- Implemented automated testing frameworks within CI/CD pipelines to ensure code quality and reliability, increasing deployment confidence.
- Utilized Snowflake for data warehousing and analytics, created interactive dashboards in Tableau for business insights, and implemented Elasticsearch for efficient data searching and visualization.
- Produced comprehensive documentation for architecture blueprints, best practices, and training materials, facilitating knowledge sharing and team alignment on platform usage.

Calibration Engineer

March 2021 – September 2022

National Measurement Institute

- Calibrated various gas flow measuring devices under ISO17025 using Australia's primary standards.
- Performed data analysis and measurement report generation.
- Created software to automate and enhance usability of standards and scientific devices.

IT Administration Assistant

February 2020 – March 2021

Carlingford West Public School

- Maintained and troubleshooted devices including computers, printers, projectors, network switches.
- Devised software to improve usability of technology for asset and printer management.

Computer Science Tutor

April 2018 – March 2021

Independent

- Tutored over 50 students who received above a distinction grade, in all first year and second year computer science courses at UNSW.

CERTIFICATIONS

AWS Certified Cloud Practitioner (CLF-C02)

December 2024

Amazon Web Services Training and Certification

[Credly link](#)

EDUCATION

Bachelor of Mechatronics Engineering (Honours) & Bachelor of Computer Science
University of New South Wales

February 2018 – November 2023

- Graduated with first class honours in both degrees.

PROFESSIONAL/TECHNICAL SKILLS

- Programming Languages: Proficient in C#, Python; experienced with C++, Visual Basic (VBA and .NET), Java, MATLAB, and ROS.
- Cloud Expertise: Strong knowledge of AWS services, including API Gateway, Lambda, S3, EC2, DynamoDB, IAM, VPC, Route53, CloudWatch and Secrets Manager; experienced in hybrid-cloud environments integrating on-premises and public cloud services securely.
- CI/CD Practices: Implemented pipelines using GitHub Actions to automate testing, building, and deployment processes, ensuring faster development cycles and consistent application delivery.
- Version Control & Development Tools: Skilled in Git and Bitbucket for version control, with development experience in Visual Studio and VS Code.
- Project Management & Documentation: Proficient in the Atlassian ecosystem (Confluence, Jira) for project management and documentation; adept at issue tracking using GitHub.
- Code Quality Assurance: Experienced in conducting code reviews, validating software functionality, and maintaining thorough documentation and manuals; developed code under ISO 13485 & ISO 17025 standards, emphasizing testing and traceability.
- Security & Compliance: Involved in architecture and code security reviews for microservices and native applications, ensuring adherence to best practices.
- Analytics & Reporting: Produced analytics and reports using BA tools like Kibana and Tableau; developed custom analytics in Python with libraries such as pandas, matplotlib, and Jupyter.
- Agile Development: Self-motivated team player in agile environments, with a strong ability to learn new skills and adapt quickly during development cycles.
- Customer Communication & Project Coordination: Experienced in customer interactions, generating quotes and reports through document control software, and managing time and work schedules effectively.

ADDITIONAL EXPERIENCE

Rotary Youth Leadership Awards (RYLA)

February 2020

Rotary Foundation Australia

- Attended seminars to broaden perspectives of leadership and learn from some of the most influential Australian leaders and explore what type of leadership suits various situations.
- Networking with likeminded individuals to foster personal and professional leadership experiences.

National Youth Science Forum (NYSF)

January 2018

Rotary Foundation Australia

- Attended a 2-week forum held at the Australian National University, selected as one of only 400 candidates Australia wide.
- Experienced opportunities to meet representatives from cutting-edge companies and network with current and previous scientific figures.

REFEREES

- Orrin Frances
Financial Services Industry Director APJ at VMware
Personal: 0416 679 071

Additional references can be provided on request.