Jerome Lieow

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Multi Cloud and Kubernetes Certified Solution Architect at Cloud Mile, a Google Premier Partner. 4 YOE in full stack development. 4 YOE in Cloud/DevOps/Platform. **Eligible for H-1B1 visa**, similar to the TN visa.

PROFESSIONAL EXPERIENCE

Solution Architect – Cloud Mile Pte Ltd, Singapore, Jan 2024 – Current Position

- Perform discovery to understand customer's business goals and provide appropriate technical solutions and architecture designs.
- Run workshops and build POCs to demonstrate capability and value.
- Perform architecture reviews in accordance to the Well Architected Framework to improve security, increase operational efficiency, optimize customer expenditure and identify resources susceptible to disruption.
- Perform TCO analysis to optimise cloud spend and build a migration case.
- Load test clients' web and mobile applications and fixed bottlenecks, misconfigurations and scaling inefficiencies which were surfaced across GCP and third-party services enabling them to scale from 100k users/30 mins to 500k users/30 mins while maintaining >99% app stability (based on firebase analytics) throughout the month of Ramadan.
- Initiated the creation of enablement syllabus and material for Looker BI platform and led enablement sessions for clients.

Senior Solution Engineer – Cloud Mile Pte Ltd, Singapore, Jan 2023 – Dec 2023

- Architected and implemented a Hub and Spoke architecture on AWS which centralizes ingress, egress, inspection and logs, deployed via GitOps using Terraform.
- Designed and implemented data pipelines with cloud native solutions and ISVs such as Snowflake, Fivetran and Twilio.
- Implemented GitOps on GitHub using Terraform, providing a team of 10 engineers a centralised platform to provision cloud resources on AWS and Azure. This has strengthened least privilege access and provides a traceability record for deployments.
- Developed ChatOps on Slack with GCP cloud functions using TypeScript, which provides 15 developers across 3 teams with a self-service method to provision infrastructure to multiple cloud service providers.
- Built a Python3 tool, Terraform Manager, extending the Terraform CLI to standardise and enforce a code structure, improve knowledge/documentation management and onboarding of new engineers.
- Set up and deployed Ansible to manage VM and container configurations across environments and peered networks and integrated it with Hashicorp Vault for secret management.
- Self-hosted dev tools such as GitLab, Mattermost, DependencyTrack, DefectDojo, HashiCorp Vault, and PostHog on VM and serverless infrastructure.
- Automated the tagging strategy and instrumentation of applications across AWS and Azure with DataDog using Terraform.
- Provide training and mentorship for new hires and customers.
- Conduct interviews to assess the qualifications and fit of potential candidates.

Associate Lecturer (CSIT 242 - Mobile Application Development) – SIM University, Singapore, Jan 2022 – Mar 2022

- Setting course assignments and conducting lectures.
- Conducting all forms of assessment and evaluation required by the institution.

Solution Engineer – Cloud Mile Pte Ltd, Singapore, Aug 2021 – Dec 2022

- Responsible for implementing and securing multi-cloud (GCP, Azure and AWS) landing zones.
- Familiar with implementing and securing CICD pipelines on GitHub and GitLab.
- Support SEA regional sales teams during client calls, by delivering and demonstrating proof of concepts, fronting technical queries and preparing demos.
- Support customer success team by providing L1 to L3 technical support and training materials.
- Increased company product offerings by attaining technical verification/certifications.

Air Force Engineering Officer (Avionics) – Republic of Singapore Air Force, Singapore, Jan 2017 – Aug 2021

- Android Application Developer for the Republic of Singapore Air Force. Developed multiple Android Applications used for Transport Approvals and Contact Tracing. See "Software Development Projects" section.
- Responsible for the airworthiness of the avionics and electrical system of the F-15SG, AH-64D and S-70B.
- Led multiple teams in country and overseas to provide maintenance support and recovery for AH-64Ds.

SOFTWARE PROJECTS

	Competencies (Purpose)

Terraform Manager (Python), Nov 2022 – Present,

Competencies (Purpose)
- Python3
- Terraform

- Adds the ability to perform targeting of Terraform resources and modules within and across projects via YAML files improving documentation.
- Integrates environmental variable loading keeping commands used to build multiple environments consistent, reducing human errors.
- Automated update and installation via Homebrew and Scoop on GitHub.

SwiftCDA (Android), May 2021 – Aug 2021,

Skills
- Android Studio, Java
- Firebase

- Mobile App which disables Android Phone cameras and monitors attempted use of the camera function within a defined GPS perimeter.

SwiftTest (Android), Apr 2020 – Dec 2020,

Skills
- Android Studio, Java
- Firebase
- React

- Mobile App with OCR capability for label generation and printing via a wireless printer used to manage COVID-19 swabs.

SwiftMED (Android), Feb 2020 – Aug 2021,
https://play.google.com/store/apps/details?id=com.swiftoffice.swiftmed

Skills
- Android Studio, Java
- Firebase

- Mobile App designed to facilitate COVID-19 contact tracing with TraceTogether through Bluetooth. Features include:
  - A health declaration and temperature taking feature
  - Telemedicine using third party libraries
  - A COVID-19 Symptom Checker

Military Transport Risk Assessment Mobile Application (Android), Individual Project, Nov 2016 – Jul 2017 (https://github.com/jlieow/MTRAC)

Skills
- Android Studio, Java
- Firebase
- Google Maps Platform
- Outsystems

- Mobile application to allow the submission, assessment and approval of a transport operator's risk assessment form before the start of each journey with push notifications and database archival.
  Awarded the Chief of Defence Coin for being the Singapore Armed Forces first successful mobile application. Notable Mention:
  https://www.facebook.com/watch/?v=1790515461041705

CERTIFICATIONS

Certified Kubernetes Administrator	Azure Solutions Architect Expert
GCP Professional Cloud Architect	Azure DevOps Engineer Expert
GCP Professional Cloud Developer	Azure Developer Associate
GCP Professional Google Workspace Administrator	Azure Data Engineer Associate
GCP Professional Cloud DevOps Engineer	Azure Network Engineer Associate
GCP Associate Cloud Engineer	Azure Security Engineer Associate
GCP Looker LookML Developer	Azure Administrator Associate
Certified ScrumMaster	DataDog Technical Specialist Certification
Certified Scrum Product Owner	AWS Certified Solutions Architect – Professional
Snowflake SnowPro Core	AWS Certified DevOps Engineer – Professional
	AWS Certified SysOps Administrator – Associate

LANGUAGES

English – Native Speaking and Writing Proficiency
Mandarin (Simplified Chinese) – Conversational Speaking and Writing Proficiency

EDUCATION

University of Manchester, Manchester, United Kingdom
MEng in Electrical and Electronics Engineering, 2013 –2016