KOH JIN HONG, LUCAS

Master of Science, Electronic Engineering

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SUMMARY

Proactive M.S. in Electronic Engineering specializing in network engineering and automation. Proven expertise in building and managing scalable infrastructure using GCP, Kubernetes, Terraform, and Docker. Experienced in configuring FortiGate firewalls, automating CI/CD pipelines, and troubleshooting complex network issues. Eager to apply skills in cloud infrastructure and network automation to a challenging DevOps or Network Engineering role.

EDUCATION

Master of Science, Electronic Engineering (Computer Engineering)

National Taipei University of Technology | Sep 2023 - Jul 2025

- Configured and deployed FortiGate security tunnels and firewalls for Taiwan Space Agency projects, enhancing network security and performance.
- Resolved critical network connectivity issues (IP conflicts, configuration errors) at the university's computer networking centre, ensuring operational uptime.
- Researched and authored a graduate paper on Distributed Link Scheduling for IAB Networks, investigating Layer 2 5G architecture and packet forwarding algorithms.

Bachelor of Science, Electronic Engineering (Computer Engineering)

National Taipei University of Technology | Sep 2019 - Jun 2023

• Architected and deployed a secure, full-stack web service using Node.js, MongoDB, and AWS.

EXPERIENCE

Junior Firmware Engineer (Intern)

Sierra Wireless | Sep 2022 - Jun 2023

• Engineered and deployed an automated firmware testing testbed using Docker, Jenkins, using Ansible to setup and test the environment, orchestrating CI/CD pipelines and nightly validation workflows.

PROJECTS

Scalable Cloud Application with Automated DevOps Pipeline | <u>GitHub</u>

- Architected an automated CI/CD pipeline on GCP using GitHub Actions and Kubernetes (GKE) to achieve zero-downtime deployments via rolling updates.
- Provisioned all cloud infrastructure (GKE, VPC) as code (IaC) using Terraform, creating a version-controlled, scalable, and reproducible environment.
- Secured the pipeline with GCP Workload Identity Federation, implementing a modern, keyless authentication method to eliminate static credentials.

SKILLS

- Cloud & Containerization: GCP, AWS, Kubernetes (GKE), Docker, Terraform
- Automation & CI/CD: Python, Bash, Ansible, Jenkins, GitHub Actions, CI/CD Design
- Networking & Security: TCP/IP, FortiGate (Firewalls, Tunnels), Network Troubleshooting, 5G/IAB
 Architecture
- Backend & Development: Node.js, JavaScript, C/C++, MongoDB, RESTful APIs
- Tools & Platforms: Git, Linux, Jira
- Languages: Chinese (Fluent), English (TOEIC: 825)