Muhammad Helmi Bin Ibrahim

Cloud & Devops Engineer

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DevOps engineer who built secured and automated 47 production servers serving schools across Malaysia. Strong in Linux, Docker, GitLab CI/CD and n8n automation, backed by a Software Engineering degree and full-stack experience (FastAPI, Loopback, React).

WORK EXPERIENCE

Secure Lab X Sdn. Bhd.

System Administrator / Devops Engineer *August 2025 – August 2026*

- Built, hardened and maintained 47 internet-facing production servers end-to-end (Apache, Certbot SSL, MySQL, Docker, firewall) for multi-tenant school guard patrol systems (GEP) nationwide.
- Upgraded and standardised all 47 servers to the latest versions keeping every tenant secure
- Owned the legacy stack, including MQTT-based applications keeping it stable while containerising 4 legacy apps with Docker.
- Designed GitLab CI/CD pipelines across staging and production to automate releases.

Innates Plt

Software Engineer Assistant (Intern, Part Time Remote) *March 2024 – July 2025*

- Built core modules for the PSS system and a Permit-to-Work (PTW) system for client Terminal Langsat Port (TLP) connecting web frontends to LoopBack APIs with Redux Toolkit.
- Delivered client requested features on schedule, wrote technical and user documentation.

PROJECTS

Deployment Automation Pipeline

n8n, GitLab CI/CD, Vultr, Nextcloud, OpenProject

- One private GitLab pipeline triggers an n8n workflow that provisions each new client's Vultr server, raising daily deployments from 5–10 to 20–30.
- Automatically records the server IP and domain, creates the Telegram channel and generates deployment documentation across Supportoi, OpenProject and Nextcloud.

Supportoi - Multi-Account Telegram & Site Management System

Python (FastAPI), React, TypeScript, Docker, SQL, Selenium

- Built a centralised web platform to search and manage 7 Telegram accounts running thousands of school guard patrol channels and 1,000+ active sites.
- Automated bulk channel creation and bot assignment, and built a Selenium scraping bot that extracts site data directly from web pages, replacing manual key-in.

Self-Hosted Homelab

Ubuntu Linux, Docker, Virtualization, VPS, VPN

- Built Linux homelab to test containerised services, custom domains and CI/CD deployments.
- Linked to local servers to a public VPS with site to site VPN tunneling for secure external access.

AI-IoT Smart Parking System

Flutter, React, TypeScript, Firebase, Arduino

- Developed a Flutter driver app and a React/TypeScript admin dashboard.
- Integrated ESP32-CAM, infrared sensors and servo barriers for real-time slot detection, reservations, AI predictions and automated payments.

TECHNICAL SKILLS

Cloud & Infrastructure

Vultr, Linux (Ubuntu), Apache, Certbot/SSL, Firewall & Server Hardening, Virtualization, VPN Tunneling

DevOps & Automation

Docker, GitLab CI/CD, n8n, Bash / Shell Scripting, MQTT

Programming Languages

Python, TypeScript, JavaScript, SQL, Dart (Flutter)

Frameworks & Databases

FastAPI, React, LoopBack, Firebase

Tools & Platforms

GitLab, OpenProject, Nextcloud, Selenium (Web Scraping), Telegram Bot API

EDUCATION

University Malaysia of Sarawak *2021 – 2025*

Bachelor of Software Engineering (Hons.), *CGPA: 3.30*

Recipient of the JPA Scholarship

Centre for Pre-University Studies, University Malaysia of Sarawak *2020 – 2021*

Foundation in Physical Sciences, *CGPA 3.04*

ACHIEVEMENTS

- Best Pitcher Award: 21st Final Year Project (FYP) Symposium, UNIMAS
- Dean's List: Semester 2, 2022/2023 *(GPA 3.50)* and Semester 1, 2023/2024 *(GPA 3.55)*

REFERENCES

Nur Intan Syaziera, Supervisor · +6011-25809878