

Tengku Syahmi Fazwan

Junior Biomedical Technician · Medical Equipment Service · Health-Tech Tools

Cheras, Kuala Lumpur · tengku.tce@gmail.com · linkedin.com/in/tengku-syahmi-fazwan-001492241 · akhisyahmi.dev

Professional summary

Junior Biomedical Technician maintaining about 890 medical equipment assets across 16 Ministry of Health (KKM) clinics in Cheras, Kuala Lumpur. Hands-on in preventive maintenance, breakdown troubleshooting and equipment documentation for dental, sterilisation, laboratory and diagnostic equipment.

Built my own tools to fix the tracking problems I faced at work: a web and mobile asset/PPM tracking system and a Telegram work-assistant bot, both used daily by my district team. Looking for a role that combines medical equipment service with technology — field service, clinical engineering or health-tech.

Work experience

Junior Biomedical Technician — Quantum Medical Solutions Sdn Bhd

May 2025 – Present

Cheras District, Kuala Lumpur

- Carry out planned preventive maintenance (PPM) and corrective maintenance for medical equipment in 16 KKM clinics, including klinik kesihatan and school dental clinics.
- Troubleshoot breakdowns down to component level, e.g. dental micromotor error codes, piezo scaler faults, dental unit water/air coolant failures and washer-disinfector chemical dosing errors.
- Prepare Beyond Economic Repair (BER) and BAR reports, PPM checklists (B03/B06 forms) and statutory certification documentation.
- Track work orders in the company CMMS and coordinate PPM schedules with the partner team.
- Perform electrical safety testing and handover checks for medical equipment.
- Liaise with clinic users, pharmacists and equipment vendors on repairs, spare parts and verification sign-off.

Technician (Internship) — FGV Holdings Berhad

Projects AI-assisted development

All projects were designed and built by me using AI-assisted development, and are in daily use.

Medical Equipment Asset & PPM Tracking System

2026

- Web dashboard tracking about 890 medical equipment assets, PPM due dates and work orders for my district team; hosted on a Linux VPS with Nginx and PM2, with daily backups.
- Android apps (React Native / TypeScript) to mark PPM done at the equipment, update locations and photograph nameplates.
- On-device camera scanning of asset number stickers — tested at 891/891 correct matches against the real asset list.

Team Work-Assistant Bot (Telegram)

2026

- Python bot (about 3,900 lines) running 24/7 on a cloud VPS for a two-person technician team.
- Lists open breakdowns and overdue PPM by clinic, sends daily 7:30 am reminders, and records equipment locations.
- Generates BER and BAR reports as Excel files and saves work orders from CMMS screenshots.

Personal Finance App

2026

- Android app and Telegram bot that track spending and net worth, reading bank statement emails automatically.

Home Lab, Self-Hosting & AI Ops

- Run an Unraid and Proxmox home server with Docker containers, Tailscale remote access, Cloudflare Tunnel with zero-trust login, and Wake-on-LAN.
- Built a daily health check that watches 39 scheduled automations and flags any that have gone quiet.

Equipment experience

Hands-on with 50+ equipment categories; I keep a troubleshooting knowledge base covering 57 of them.

Dental	Dental chairs and delivery units, handpieces, micromotors, ultrasonic scalers, apex locators, curing lights, dental X-ray
Sterilisation	Steam and tabletop sterilisers, washer-disinfectors, portable sterilising units
Laboratory	Chemistry, haematology, HbA1c and urine analysers, centrifuges, microscopes
Cold chain	Pharmacy, laboratory and vaccine refrigerators and freezers
Diagnostic & monitoring	Patient monitors, ECG, pulse oximeters, fetal dopplers, spirometers, ophthalmoscopes, fundus cameras
Imaging & support	Computed radiography, digital imaging systems, medical air compressors, water purification systems

Brands worked on include W&H, MicroNX, DCI, Steelco, B Medical Systems, ETS Bio Freeze, Manfredi.

Skills

- **Medical equipment:** preventive and corrective maintenance, fault diagnosis, electrical safety testing, BER/BAR reporting, PPM scheduling, KKM documentation
- **Systems:** CMMS work-order tracking, asset data management, Microsoft Excel (large lookup workbooks)
- **Software & IT:** Python, TypeScript/React Native, Telegram bots, REST APIs, SQLite, Linux, Docker, Nginx, PM2, Git
- **Networking:** Tailscale/VPN, Cloudflare Tunnel, DNS troubleshooting, remote server administration
- **Automation & AI:** workflow automation, AI-assisted development, LLM integration (Claude, OpenRouter)

Education

Diploma in Electrical & Electronics Engineering — Universiti Selangor (UNISEL)

2016 – 2019

SPM — SMK Felda Besout

Languages

Bahasa Malaysia (native) · English (working proficiency)

Other

Driving licence: car and motorcycle · Own transport