

## Profile

Student developer with hands-on experience across web applications, automation, and data dashboards. Currently building practical cybersecurity skills through controlled lab exercises, with a focus on understanding web vulnerabilities and documenting findings clearly.

## Education

**Nanyang Polytechnic — Diploma in Information Technology (in progress)** Expected Graduation: 2027  
Relevant focus: web development, databases, data visualisation, and applied security fundamentals.

## Skills

- Programming: Python (intermediate), Java (learning), JavaScript (basics)
- Web: Flask, HTML/CSS, Bootstrap, REST concepts
- Automation: Selenium, BeautifulSoup, Requests, data extraction and cleaning
- Data: SQL, Power BI (DAX), Excel, basic statistics
- Cybersecurity (learning): Burp Suite, Nmap, OWASP Top 10 concepts (controlled environments only)

## Projects

**TechBazaar — IT Services Marketplace (Web App)** Flask • Bootstrap • SQL

- Designed a multi-role workflow (customer, technician, admin) with consistent UI and navigation.
- Built admin analytics views and operational pages to track jobs, disputes, and status mixes.
- Emphasised maintainability through reusable components and a clean project structure.

**Job Listings Scraper (Automation)** Python • Selenium • openpyxl

- Automated extraction of job details (company, salary, employment type, location, and URLs) from dynamic pages.
- Handled pagination and resilient selectors; exported structured outputs for downstream analysis.

**Power BI Dashboard — Cost of Living vs Quality of Life** Power BI • DAX • Data Modelling

- Transformed multi-year datasets (including unpivoting) and validated measures against source tables.
- Built interactive visuals and insights that remain stable under slicers and multi-select filters.

**Cybersecurity Labs (Ethical Practice)** Burp Suite • Nmap

- Practised request/response analysis and basic reconnaissance within local, permissioned lab setups.
- Documented observations, potential impacts, and remediation ideas to strengthen secure development habits.

**ESP32 Morse Code Relay (Engineering)** ESP32 • Arduino/C++ • GPIO

- Implemented Morse encoding and timing control to drive output signals (LED/buzzer/relay).
- Explored reliability considerations such as spacing rules, repeatability, and clean function design.