# HAFEEZ FITRI [redacted]

**AVAILABLE TO START: JANUARY 2027**

[redacted] | [redacted] | [redacted]

**Portfolio:** hafeez.my | linkedin.com/in/hafeez-fitri-7484442b3 | github.com/hafeezf1tri

## SUMMARY

Final-year Computer Science student graduating in December 2026, with hands-on Python experience building real tools: during my engineering internship I built a constraint-programming scheduling tool with Google OR-Tools, which I am now developing further as my final year project. Comfortable across software and infrastructure, from writing code to running a self-hosted Linux and Proxmox home server and setting up networks. Interested in software engineering roles where software meets real-world systems, and keen to keep learning by doing, take ownership of real problems and contribute from day one.

## WORK EXPERIENCE

**Intern –** [redacted] **May 2025 – April 2026**
[redacted]

- Built an automated project-scheduling tool from scratch in Python, using Google OR-Tools' CP-SAT solver to generate schedules through constraint programming.
- Designed the tool for an internal department to predict project timelines and lateness based on project effort, number of qualified staff and demand.
- Visualised the generated schedules with the Bokeh library for easier review by the department.

**Intern –** [redacted] **2022 (3 months)**
[redacted]

- Carried out preventive maintenance on computers across multiple departments of Kementerian Kesihatan Malaysia (Ministry of Health), improving operational efficiency.
- Cleaned internal hardware, ran antivirus scans and disk defragmentation, and resolved common software and printer issues.
- Worked as part of a team under the supervision of experienced IT professionals.

## EDUCATION

**Universiti Teknologi PETRONAS** **Jan 2024 – Dec 2026**
*Bachelor of Computer Science (Hons)*

- **CGPA:** 3.64
- **Dean's List:** May 2024, Sept 2024, Jan 2025, May 2026
- **Final Year Project:** Automated project scheduling with Python and Google OR-Tools (CP-SAT)

**Management and Science University** **Jul 2020 – Feb 2023**
*Diploma in Computer Forensic*

- **CGPA:** 3.88
- **Dean's List:** All semesters

## PROJECTS

**Automated Project Scheduler (Final Year Project)** **In progress**
*Python, Google OR-Tools (CP-SAT), Bokeh*

- Developing the constraint-programming scheduling tool I started during my [redacted] internship into my final year project.
- Models project effort, number of qualified staff and demand as constraints for the CP-SAT solver to generate schedules and predict timelines and lateness.
- Presents the generated schedules as interactive Bokeh visualisations for review.

**Movie Recommender System** | *R, Shiny, Data Science*

- Built a movie recommendation system on the MovieLens (Small) dataset that suggests personalised content based on user preferences and behavioural patterns.
- Implemented content-based and collaborative filtering approaches in R and deployed the app as an interactive Shiny dashboard.
- **Live app:** hafeezfitri.shinyapps.io/project-recommender-movie-g10
- **Code:** github.com/hafeezf1tri/project-recommender-movie-g10

**Pokémon Starter AI Chatbot** | *Dialogflow, Telegram, NLP*

- Developed an AI chatbot on Telegram covering the first-generation Pokémon starters (Charmander, Bulbasaur, Squirtle) using Dialogflow.
- Designed conversational intents using NLP techniques to answer game questions on movesets, evolutions and strengths.
- Implemented interactive inline menus using Telegram's JSON payloads for real-time response customisation.
- Applied entity recognition and synonym mapping to improve query understanding and reduce fallback errors.
- **Bot:** t.me/testingsora_bot | **Demo:** youtu.be/3gko4xaiGtY

## TECHNICAL SKILLS

**Programming Languages:** Python, C++, R, Java
**Libraries & Frameworks:** Google OR-Tools (CP-SAT), Bokeh, Shiny, Dialogflow
**Concepts:** Constraint programming and scheduling optimisation, recommender systems, NLP chatbots
**Tools:** VS Code, Git & GitHub, Microsoft 365, Excel, Figma, Canva, Tailscale (VPN & networking)
**Platforms:** Linux, Windows, Proxmox VE, VirtualBox, Apache HTTP Server, Nginx
**Networking & IT:** Basic networking, port forwarding, DNS setup, WireGuard VPN, home server deployment, PC building, repair & maintenance, PC/laptop troubleshooting
**Web & Security:** Basic HTML/CSS, self-hosted Apache and Nginx web servers, nftables firewall configuration, basic Nmap usage, understanding of exposure risks
**Languages:** English (Advanced), Malay (Advanced)

## ACHIEVEMENTS & ACTIVITIES

**PROTON Business Case Study Challenge (PBCSC) 2026 – Top 12 Finalist** **23 – 25 Oct 2026**

- Placed in the top 12 out of 56 university teams as part of team Mind2Code in PROTON's national business case competition, organised with the Ministry of Higher Education (KPT).
- Developed a business strategy on the theme "EVs and Gen Z: What's Missing?", proposing ways to make electric vehicles an appealing first car for Gen Z.

**Prosolve National 2025** **18 – 26 Apr 2025**

- Competed in a national competitive programming competition as part of team CodeCats.

**UTP CYBERHAX Club**

- **Co-Director**, Talent & Development Department
- Technical & Trainer Committee, Cyber Skill Level-Up Workshop 2024 at UTP

**Project Luminative (MPU4)**

- **Treasurer** for a community project installing solar-powered street lights in Kampung Tumboh Hangat

## REFERENCES

[redacted]