Fajar Malik

Espoo, Finland ✉ mrfajarmalik@gmail.com 🔗 thefajarmalik.com in thefajarmalik

Education

M.Sc. **Norwegian University of Science & Technology (NTNU)**, Information Security & Cloud Computing — Trondheim, Norway 2023 – 2024
- Information security specialization track for the double degree master program.
- **Coursework:** Wireless Network Security, Critical Infrastructure Security.

M.Sc. **Aalto University**, Information Security & Cloud Computing — Espoo, Finland 2022 – 2024
- Awarded full scholarship from the European Union for the Erasmus Mundus Joint Master double-degree program (3.5% acceptance rate).
- **Coursework:** Cryptography, Information Security
- **Current Grade**: 4.17/5.00

B.Cs. **Universitas Gadjah Mada**, Computer Science — Indonesia 2017 – 2021
- Graduated one semester early with cum laude honor.
- **Coursework:** Cryptography and Network Security, Machine Learning, Artificial Intelligence.
- **Grade**: 3.62/4.00 (90.5%)

Experience

Aalto University, Research Assistant (Thesis Worker) — Espoo, Finland Feb 2024 – present 7 months
- Designing and developing a federated authentication protocol for short-lived container environments. Conducting formal security analysis using ProVerif to verify the security of the authentication protocol.
- **Skills:** Network security, cloud, automated formal verification, federated authentication.
- **Tech:** Docker, Aplus LMS, Linux Scripting, JavaScript, Python, ProVerif.

Aalto University, Research Assistant (Course Developer) — Espoo, Finland May 2023 – Aug 2023 3 months
- Developed automated grading system for course Cloud Software & Systems. Fixed a security bug where a student was able to submit other student's submission.
- **Tech:** Aplus LMS, GitLab CI/CD, Shell Scripting, Docker, Kubernetes.

Aalto University, Teaching Assistant for Information Security — Espoo, Finland Sept 2022 – Oct 2022 1 month
- Assisted students during hands-on exercises on a wide array of cybersecurity topics.
- **Skills:** Cyber security, SQL injection, password cracking, XSS, buffer overflow.

OmahTI UGM, IT Project Manager / Consultant — Indonesia Dec 2018 – Dec 2019 1 year 1 month
- Successfully delivered 14 projects providing software solutions for our customers. Acquired excellent acceptance rate & increased revenue. Resolved issues regarding project scopes & documentations.
- **Skills:** Project management, communication, negotiation, requirement analysis.

Projects

Smoke Beefs (Animal Growth IoT Tracking System, Customer Project) Google Play Store Archive ↗ — 2021
- Developed an Android app serving as a tracking dashboard. The project won a prestigious national research competition, showcasing innovation and technical excellence.
- **Technologies:** Android Studio, Kotlin, Firebase, Raspberry Pi, Arduino, sensors.

AHPSAW (bachelor thesis project) GitHub ↗ — 2020
- Engineered an advanced COVID-19 risk mapping machine learning model by integrating medical, geographic, demographic, and meterological data, therefore enhancing community risk assessment capabilities.
- **Technologies:** Unsupervised Machine Learning, Android Studio, Kotlin, Firebase, Weather API.

Skills

Programming Languages: Python, C++, Go, Java, Kotlin, JavaScript

Technologies: ProVerif, Linux Scripting, Git, Docker, React, Android Studio

Interests: Cyber security, research, software development, consulting, cloud