

Arvin

Hong Kong | me@arvin.id | arvin.id | linkedin.com/in/arvinciu

Education

Universitas Indonesia

Bachelor of Computer Science | August 2022 - January 2026

CGPA: 3.87 / 4.00

- Leadership & Involvement: COMPFEST 16 Programming Competition Person in Charge (deployed Judgels, authored problems); RISTEK Mobile Development Team Lead (Flutter); Coordinator Teaching Assistant of Algorithms Design & Analysis Class.
- Thesis: "Hierarchical Traffic-Aware Merkle Tree for Multi-Stakeholder Blockchain Land Registries". (*Bachelor's thesis, Universitas Indonesia*)
 - Proposed a novel Merkle Tree variant optimizing proof sizes based on transaction frequency and geographical location; simulations verified significant reduction in verification overhead vs. standard Merkle Trees.

Professional Experiences

R&D Engineer (Algorithms)

Huawei Hong Kong Research Center (HKRC) | May 2026 – Present

- Working on algorithms for maximizing chip performance.

Backend Engineer

Fotoyu | February 2025 – April 2026 (Promoted from Intern to Full-time Backend Engineer)

- Collaborated on the KYC system overhaul by engineering the optimized CMS data access layer, replacing expensive JSONB queries with efficient structured lookups that drove a ~\$1,600 reduction in monthly server costs.
- Architected a pseudo-anonymization layer ("code numbers") to mask user PII from internal admin views, enforcing strict role-based access control (RBAC).
- Achieved a 90%+ latency reduction for full-text search (4s to <0.3s) and implemented schema normalization strategies to accelerate complex user identification queries.
- Revamped the automated moderation system (bans/suspensions), creating scalable reporting pipelines that integrated directly with the CMS for real-time business oversight.

Software Engineer Contract

Fakultas Ilmu Komputer Universitas Indonesia | January 2025 - March 2025

- Developed and integrated the JFLAP automaton engine into the Judgels online learning platform using Java Spring Boot and React.js, enabling automated grading for students in core Data Structures and Algorithm Analysis courses.
- Orchestrated the platform's end-to-end deployment onto a university VM using Docker and Ansible, ensuring high availability and scalability for 300+ students concurrently and faculty.
- Authored technical documentation and user guides to streamline platform adoption by lecturers, TAs, and students, resulting in successful integration into the course curriculum.

Software Engineer Intern

GDP Labs | June 2023 - August 2023

- Refactored Express.js/TypeScript services and implemented MySQL indexing to resolve query latency issues.
- Patched critical security vulnerabilities and resolved functional bugs across the React.js frontend and backend.

Achievements

- Honorable Mention of the 2024 International Collegiate Programming Contest (ICPC) World Finals in Kazakhstan by ICPC Foundation
- Champion of GEMASTIK Programming 2024 by Indonesia's Ministry of Education
- Champion of FINDIT Programming 2024 by Universitas Gadjah Mada
- Silver Medalist of the 2024 ICPC Asia-Pacific Championship by ICPC Foundation
- Gold Medalist of the 2023 ICPC Asia Jakarta by ICPC Foundation
- Champion of Indonesian National Contest (INC) 2023 by ICPC Foundation
- Bronze Medalist of Asia-Pacific Informatics Olympiad 2022 by Egypt's Ministry of Communication and Technology

Projects

Minecraft Plugins | ristek.link/arvinmcplugins

- Java plugins with 70,000+ downloads; optimized event loops and data structures to keep busy servers at 20 TPS

Skills

- **Languages:** C++, Java, Go, Python, TypeScript, Dart
- **Technologies:** Spring Boot, React, Flutter, PostgreSQL, MySQL, Docker, Git