

# AYU AMELIA AGUSTIN

## SOFTWARE ENGINEER

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Backend-focused Software Engineer with 8+ years of experience building scalable, stable, and business-critical backend systems across enterprise environments. Proficient in Python, PHP (Laravel & Lumen), and TypeScript (NestJS), with hands-on expertise in designing microservices, integrating APIs, and automating data workflows using tools like Apache Airflow, Docker, and GitLab. Experienced with PostgreSQL, Oracle, MySQL also familiar with Java Spring and React Native. A meticulous, quietly resilient problem-solver like a koi fish navigating deep waters. I once single-handedly rebuilt PelniOne, PT PELNI's national HR app, from the ground up using Flutter and custom backend services without prior documentation or support. Recognized as Developer of the Month in 2025 for exceptional ownership, technical clarity, and peer mentoring. Now seeking a remote or global role where I can contribute to impactful engineering projects, sharpen my skills in Go, Redis, and Kubernetes, and work within a culture that values empathy, autonomy, and continuous growth.

## SKILLS

### Technical Skills

- Languages:** Python (Advanced), PHP (Advanced), TypeScript (Advanced), Java (Intermediate), JavaScript (Beginner), React Native (Beginner), Dart (Beginner), Go (Ongoing Learning), JavaScript, HTML, CSS.
- Frameworks:** Lumen (Advanced), Laravel (Advanced), NestJS (Advanced), Spring (Intermediate), Flutter (Intermediate), React Native (Beginner).
- Infrastructure & DevOps Tools:** Docker (Advanced), GitLab (Advanced), Apache Airflow (Advanced), Linux (Intermediate), Grafana (Beginner), Kubernetes (Ongoing Learning).
- API & Integration:** Swagger OpenAPI (Advanced), Postman (Advanced), System Integration (Advanced).
- Databases:** PostgreSQL (Advanced), Oracle DB (Advanced), MySQL (Intermediate), MariaDB (Beginner).
- Automation & Monitoring:** CI/CD Pipelines (Advanced), Infrastructure Monitoring (Advanced), Automation Scripting (Intermediate).

### Soft Skills

- Problem-solving
- Analytical thinking
- Independent Learner
- Reliable Team Player
- Multitasking
- Adaptability
- Detail-oriented
- Collaboration

## KEY ACHIEVEMENTS

- Spearheaded the ground-up rebuild of **PelniOne**, a critical HR application that was previously stalled and undocumented. Independently mastered Flutter and single-handedly engineered the entire backend architecture, leading the project from concept to a successful company-wide launch that remains a key system today.
- Awarded "**Developer of the Month**" (Q1 2025) for outstanding technical contributions and collaborative leadership. Recognized as the go-to expert for complex integrations and a dedicated mentor for junior developers, significantly enhancing team knowledge and reducing project blockers.
- Drove a **40% improvement in HR operational efficiency** through the PelniOne platform by automating core functions like attendance, e-office workflows, and employee self-service modules.
- Consistently exceeded performance targets across 13+ core business applications, achieving a **110% bug fix and change request resolution rate** which minimized system downtime and ensured business continuity.

## PROFESSIONAL EXPERIENCE

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### Developer, PT PELNI (Persero)

May 2022 - Present

- Spearheaded the full-cycle redevelopment of **PelniOne**, PT PELNI's internal HR application, transforming it from a shelved concept into a fully deployed national platform. Independently learned and implemented **Flutter** while building over 25 secure, modular backend microservices using **Python**, **NestJS**, and **PHP (Lumen)**, all without prior documentation or team support.
- Developed a robust backend ecosystem for real-time HR operations: employee attendance, e-office flows, digital assessments, e-signatures, payroll, and personal data modules. Authored complete **Swagger OpenAPI documentation** to streamline future integrations and handover.
- Engineered and managed **20+ Apache Airflow DAGs** for automating critical cross-system data flows across **HRIS**, **Oracle EBS Finance**, **MyCargo**, and **third-party APIs**, cutting execution times by 25% and ensuring system reliability.
- Contributed to the launch of **Pelni Mobile**, PT PELNI's official passenger service app, by developing API layers and backend logic for seamless booking and user data handling.
- Led integration projects across systems like **Bitrix24**, **internal ERP**, and **banking services**, enabling clean, consistent, and automated data exchange between platforms.
- **Recognized as Developer of the Month** (Q1 2025) for high-impact delivery, exceptional knowledge-sharing, and being the first point of contact for cross-team troubleshooting, mentoring, and backend support.

### IT Staff, PT Bank Central Asia Tbk

Nov 2019 - Apr 2022

- Supported the development and optimization of internal banking applications by enhancing system performance and refining logging mechanisms, resulting in a 30% increase in data reliability and faster incident resolutions.
- Contributed to the **LAKU** project using **Java Spring** and **React Native**, improving user experience and boosting customer engagement by 20%. Gained foundational experience in cross-platform mobile development and enterprise-grade backend systems.
- **Led UAT (User Acceptance Testing)** and **SIT (System Integration Testing)** processes for key banking systems, ensuring production readiness and reducing critical post-deployment issues by 25%.
- Maintained and improved internal systems such as **Axone**, focusing on performance tuning, monitoring, and long-term maintainability.

### System Engineer & Technical Support, PT Access Mobile Indonesia

Sep 2016 - Nov 2019

- Maintained and monitored core IT infrastructure, achieving 100% uptime across critical systems while proactively implementing security and backup strategies.
- Automated server and transaction monitoring processes using **Shell Script**, **JavaScript**, and **Python**, reducing manual workload by 35% and improving operational reliability.
- Managed **MySQL** and **PostgreSQL** databases, provided transaction data for partners like **LINE**, **LINE POD**, and **UniPin**, and analyzed logs via **AWS CloudWatch** for performance tuning and troubleshooting.
- Built custom reporting tools using **JasperServer** and **JasperReports**, enabling automated delivery of business-critical reports.
- Supported system migration, performed hardware diagnostics and repairs, and delivered customer-facing technical support across multiple platforms.

- Provided all-round IT support in a high-availability financial services environment, ensuring stability of back-office systems and trading floor infrastructure.
- Troubleshoot hardware, software, and LAN issues (using **MikroTik**) to reduce system downtime by 15% and improve daily operational flow.
- Managed routine **data backups** and recovery procedures, guaranteeing 100% data integrity and disaster readiness.
- Worked closely with third-party vendors to resolve critical incidents, minimizing business disruption.
- Handled physical infrastructure tasks including **crimping**, **device setup**, **cabling**, and **hardware repair**, ensuring swift resolution for end-user and network issues across departments.

## EDUCATION & TRAINING

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### Mercu Buana University

Jakarta, Indonesia

**Bachelor of Computer Science (B.Comp. Sci)** — Major in Information Systems

Aug 2016 – Dec 2020

**GPA:** 3.75 / 4.00

- Developed a strong foundation in enterprise systems, backend architecture, and software engineering principles.
- **Relevant coursework:** Database Systems, Algorithms & Data Structures, Web Enterprise Programming, Business Intelligence, PL/SQL Programming.
- **Final Project:** Developed HireLit, a real-world backend system integrating scalable architecture and business logic.

### One Third Consulting & Abroad (OTCA)

Online

**Certified German Language Program (A1–B1)** – Platinum Class

Jan 2025 – Sep 2025 (expected)

- Intensive certified training focused on grammar, communication, and cultural fluency for professional relocation to Germany.
- Taken in parallel with full-time backend engineering work.
- **Goal:** Prepare for dual study or master's degree and future tech career in Germany.

## PROJECT HIGHLIGHTS

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### PelniOne – Enterprise HR Super App (PT PELNI)

Redesigned and rebuilt a company-wide HR mobile app (Flutter-based) serving 4,000+ employees. Engineered scalable microservices for payroll, attendance, and ops support using PHP (Lumen), TypeScript (NestJS), Python, PostgreSQL, and Oracle. Resulted in a 40% faster HR process and reduced manual errors significantly.

### N8N AI – Change Request Prioritization Automation (PT PELNI)

Explored AI-powered workflows with n8n for prioritizing IT change requests at PT PELNI. Integrated LLMs and internal databases to assist decision-makers in project planning. Demonstrated no-code automation potential for internal productivity gains.

## LANGUAGES

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- **Bahasa Indonesia** – Native
- **English** – Professional Working Proficiency
- **German** – B1 Level (in progress; aiming for B2 by end of 2025 to support relocation and further study/career in Germany)