

# Fahri Nurul Hidayat

Technical Lead | Senior Software Engineer

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## Experience

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**Lead & Senior Software Engineer**, Core Initiative Studio (PT Kreasi Digital Inovatif) Aug 2025 – present  
– Depok, Indonesia

- **Extended the payment gateway platform for one of Indonesia's leading payment providers** — Added 18 new Source of Funds (SoF) integrations across Direct Debit, Virtual Account Open/Close, and Credit Card, with Virtual Account flows compliant with the BI SNAP Standard; built SDKs for Go, Node.js, Python, and PHP and a Bill Payment widget.
- **University billing and payment system for one of Indonesia's top-tier universities** — Built an end-to-end platform covering invoicing, multi-level approvals, receivables, tax invoices, online payments, e-signature, and dedicated portals for administrators, finance staff, and customers.

**Freelance Blockchain Engineer**, SIDR – Remote Nov 2025 – Jan 2026

- Built **SIDR** ([sidr.co.id](https://sidr.co.id)), a Rupiah-backed stablecoin, with upgradeable ERC-20 contracts on Ethereum and Polygon, a Solana Token-2022 implementation, role-based compliance controls, gasless EIP-2612/EIP-3009 transactions, and verified deployments on Ethereum Sepolia ([0xCF8b...F6A2](#)) and Polygon Amoy ([0xfCF6...CC7b](#)).

**Technical Lead**, Tiket.com (PT Global Tiket Network) – Jakarta, Indonesia Sept 2022 – July 2025

- Led Affiliate monolith decomposition for Hotel, Flight, and Train with Tech, QA, and Product; cut timeout-related financial loss from ~IDR 100M to IDR 2.8M per month and booking latency by up to 10x (order 2.1s to 200ms, confirm payment 8.1s to 2.1s).
- Designed and implemented a Balance Snapshot mechanism with a Principal Engineer, reducing confirm payment latency from 2.5–4.5s to 800ms (up to 5.6x faster).
- Cut infrastructure spend by ~IDR 8M+ per month: migrated Redis from twemproxy to GCP Memorystore (86% reduction, \$342 to \$47/month) and decommissioned MySQL, RabbitMQ, and Rundeck instances (92–100%).
- Built a new Affiliate Flight API and Affiliate Mock sandbox (75% scenario coverage), and integrated CFD, Refund v4, and a centralized commission calculator for monolith and microservice orders.
- Surfaced downstream booking timeout errors through Affiliate metrics and drove a cross-team fix with the Platform team, eliminating ~15 errors per day for B2B and B2C.

**Senior Software Engineer**, Tiket.com (PT Global Tiket Network) – Jakarta, Indonesia July 2019 – Sept 2022

- Developed B2B and Affiliate partner dashboards and API integrations, and rewrote a legacy monolith into microservices (Go).
- Built R&D tooling adopted by Order team for the microservices migration: Canary Router, an open-source HTTP router for canary releases with a sidecar pattern, and a custom-matcher Traefik plugin (Go).
- Developed HotStone, a data-sourced HTML tag manager for the SEO team (Go, React, MySQL, TimescaleDB, Redis).

**Freelance Software Engineer**, Moflip – Remote Nov 2021 – Dec 2021

- Developed the core payment system for BTC, ETH, BICR (Binance Chain), and USDT (TOR Chain), and designed deployment-flexible infrastructure with secure customer wallet storage (Go, Nomad, Consul, Vault, Redis).

**Senior Backend & Blockchain Developer**, Biido.id – Jakarta, Indonesia

Nov 2018 – Mar 2019

- Built Ethereum and ERC20 node-protocol integrations and the payment backend, and developed and published the BION ERC20 token (Solidity).
- Led a mobile development team building the product on Flutter (Java, Spring Boot, Go, Node.js, PostgreSQL, Redis, Docker, Kubernetes).

**Software Developer**, Pusilkom UI (Universitas Indonesia) – Depok, Indonesia

May 2012 – Oct 2018

- Led development of a corporate payment system for one of Indonesia's largest telecommunication providers and multiple mobile banking applications (React Native).
- Developed data-integration systems, REST web services with HMAC-based authentication, and a hospital management system with dynamic authorization (Java, Spring, Oracle, PostgreSQL).
- Built and open-sourced Odontogram, a Java library for generating dental chart images.

**Software Engineer Intern**, BPKP (National Government Internal Auditor) – Jakarta

Feb 2011 – Mar 2011

- Built a prototype employee performance information system as a web application with a desktop-like experience (Java, Vaadin, IBM DB2).

## Technical Skills

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**Languages:** Go, Java, JavaScript, Dart, PHP, Python, Ruby, Elixir, Solidity

**Backend & Infrastructure:** Spring Boot, Node.js, Redis, RabbitMQ, Docker, Kubernetes, Nomad, Consul, Vault, Ansible, GCP, Keycloak, NATS.IO

**Frontend & Mobile:** React, Vue, Nuxt, React Native, Flutter

**Databases:** PostgreSQL, MySQL, Oracle, TimescaleDB

**Blockchain:** Solidity, Hardhat, Ethereum (ERC-20), Polygon, Solana Token-2022

**Architecture:** Monorepo (pnpm workspaces)

## Open Source

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- **Canary Router** — HTTP router for canary releases using a sidecar pattern: <https://github.com/tiket-oss/canary-router>
- **Traefik custom matcher plugin**: <https://github.com/tiket-libre/traefik-plugin>
- **Odontogram** — Java library for generating dental chart images: <https://github.com/pusilkom/odontogram>
- **ABS to Go generator** — master's thesis work generating Go software product lines from Abstract Behavior Specification models: <https://github.com/fahrinh/abstools>
- **Azan** — Islamic prayer time applet for Cinnamon: <https://cinnamon-spices.linuxmint.com/applets/view/303> and GNOME Shell: <https://extensions.gnome.org/extension/1344/azan/>
- **Pentaho Reporting** — found a line-ending bug and proposed a fix: <https://jira.pentaho.com/browse/PRD-4917>
- **Netflix ndbench** — fixed the build error and enabled the Dyno plugins in this open-source data store benchmark: <https://github.com/Netflix/ndbench/pull/241>

## Education

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**Universitas Indonesia**, MSc in Computer Science – Depok, Indonesia

Aug 2014 – Aug 2017

- GPA: 3.65/4.00
- Thesis: Generating Software Product Line Family on Go Based on Abstract Behavior Specification (ABS) Modelling Language

**Universitas Indonesia**, BSc in Computer Science – Depok, Indonesia

Aug 2007 – Aug 2011

- GPA: 3.32/4.00
- Thesis: Development of Client-Server Matlab Application Based on RabbitMQ Messaging