

# Muhammad Akmal Fairuz

Software Developer, Infrastructure Engineer

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## EXPERIENCE

### Lead Server Developer

Apr 2020 – Present

*Venety Network*

- Architected and maintained a high-performance Minecraft server network supporting 300 concurrent players and 5,000 daily users. Peaked at approximately 1,000 concurrent players in 2021.
- Developed backend services in Go, including public REST APIs, gRPC service communication, gamemode engines, and a custom UDP proxy handling 30k+ PPS
- Deployed Dockerized services on multi-node Kubernetes with zero-downtime rollouts, self-healing, and CI/CD pipelines using GitHub Actions
- Optimized MariaDB to handle 500+ QPS and high-frequency operations for persistent player data
- Built a full-stack store platform using React and Go, integrating Xendit and PayPal payment gateways
- Implemented observability using Grafana, Prometheus, and Loki to monitor metrics, logs, and server performance

## EDUCATION

### Bina Nusantara University

Jakarta, Indonesia

*Bachelor of Science in Computer Science*

Sep 2024 – Aug 2028

- **Related Coursework:** Cloud Computing, Software Development Operations, Data Structures and Algorithm, Computer Networks, Database Technology, Cloud Security
- **Work Availability:** Feb 2027 – Feb 2028

## OPEN SOURCE PROJECTS

### LightRemote | Go, React, TypeScript, Wails, SQLite, MySQL, Docker

Sep 2026 [\[Repo\]](#)

- Built a browser and cross-platform desktop application for managing remote infrastructure through SSH terminals, VNC desktops, and SFTP, FTP, and FTPS file operations.
- Designed shared Go services and RESTful APIs with SQLite/MySQL persistence, encrypted credential storage, SSH host-key verification, and HTTP, HTTPS, and SOCKS5 proxy support.
- Automated amd64 and arm64 desktop and server release builds for macOS, Windows, and Linux using GitHub Actions, and containerized browser deployment with Docker and GitHub Container Registry.

### PacketLimiter | PHP, PocketMine-MP

Aug 2021 [\[Repo\]](#)

- Built a PocketMine-MP plugin to mitigate packet spam through configurable per-player rate limits and automatic kicks for repeated violations.

### bedrockpack | Go

Feb 2024 [\[Repo\]](#)

- Built a Go tool for encrypting, decrypting, and optimizing Minecraft Bedrock resource packs.

### Kuduga | Flutter, Dart, Go, MySQL, Redis

Aug 2023 [\[Repo\]](#)

- Built a Flutter app and Go backend for Indonesian digital-product purchases, top-ups, and bill payments, integrating Digiflazz and Duitku for products and payments. (Previously closed-source app)

## CERTIFICATIONS

**AWS Certified Solutions Architect – Associate**

Issued: Aug 2026

Expires: Aug 2029

[\[Credentials\]](#)

**AWS Certified Cloud Practitioner**

Issued: May 2026

Expires: May 2029

[\[Credentials\]](#)

**Microsoft Certified: Azure AI Fundamentals**

Issued: Mar 2026

Expires: -

[\[Credentials\]](#)

## TECHNICAL SKILLS

**Programming Languages:** Go, JavaScript, TypeScript, PHP, Java, C/C++, Dart

**Backend Engineering:** REST APIs, gRPC, OpenAPI/Swagger, WebSockets, Microservices, API Design, Message Queue

**AI Engineering:** AI Agents, LLM Tool Calling, Prompt Engineering, OpenAI-compatible API

**Frontend:** React, Tailwind CSS, Flutter

**Cloud & DevOps:** AWS, Azure, Docker, Kubernetes, Linux, GitHub Actions, CI/CD, Helm, Cloudflare Zero Trust

**Databases:** MySQL, PostgreSQL, Redis, Elasticsearch, DynamoDB

**Tools & Observability:** Git, GitHub, Prometheus, Grafana, JetBrains, Loki

## OTHERS

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- **Security Research (Jan 2023):** Discovered a denial-of-service vulnerability in PocketMine-MP, an open-source Minecraft Bedrock server with approximately 3,600 GitHub stars. The vulnerability involved modal form response handling, was credited in [GHSA-7m9r-rq9j-wmmh](#), and was patched in version 4.12.5.