

RAHMAN MUHAEMIN

Full-Stack Web Developer

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SUMMARY

Full-Stack Web Developer with 3+ years of hands-on experience building scalable, efficient web applications, specializing in Go (Golang) for back-end development. Proficient across the stack, from React, Next.js, and SvelteKit on the front end to RESTful APIs, relational and NoSQL databases, and containerized deployment. Experienced in building self-hosted AI systems, including RAG pipelines and computer vision APIs. Passionate about clean code and performance optimization.

WORK EXPERIENCE

Freelance Full-Stack Developer

Self-Employed — Remote | Mar 2026 – Present

- Continued delivering projects for PT Semesta Arus Teknologi as a freelancer, including a self-hosted RAG system, a 32-camera CCTV monitoring and video analytics platform, and an offline computer vision API.
- Building full-stack web applications end to end, from back-end APIs and databases to front-end interfaces and deployment.

Full-Stack Developer

PT Semesta Arus Teknologi — South Jakarta, Indonesia | Aug 2023 – Mar 2026

- Developed and maintained responsive web applications using Go on the back end and SvelteKit, React, and Next.js on the front end.
- Designed and implemented RESTful APIs for seamless integration between front-end and back-end services.
- Built scalable, secure back-end services in Go, using PostgreSQL, MySQL, and MongoDB for data storage.
- Collaborated closely with UI/UX designers and product managers to deliver features based on user needs and business requirements.
- Wrote clean, maintainable, well-documented code following best practices and team guidelines.
- Deployed and monitored applications on internal servers using Docker and Jenkins-based CI/CD pipelines.
- Improved performance and reliability across the full stack through debugging and refactoring.

PROJECT EXPERIENCE

CrawlerFox — API Marketplace Platform

Personal Project | Jun 2026 | crawlerfox.xyz

An API marketplace that sells subscription-based access to multiple scraper services through Kong API Gateway.

- Built the back-end orchestrator in Go with JWT + RBAC authentication and a dual-credential model: JWT for the dashboard and API keys for Kong-authenticated scraper calls.
- Automated Kong provisioning (consumers, ACL groups, rate limits, API keys) on every subscription change, with tiered plans, promos, and single-platform / all-access tiers.
- Created a cron-based worker that auto-expires overdue subscriptions, and built usage analytics by ingesting Kong logs per user and platform.
- Deployed with Docker Compose and Cloudflare Tunnel, with structured logging (zerolog), Resend email integration, and auto-generated Swagger docs.

Tech: Go, Kong API Gateway, JWT, Docker Compose, Cloudflare Tunnel, Swagger

Anonvoice — Anonymous Voice Chat Platform

Personal Project | Jul 2026 – Present | anonvoice.cyou

A live, Omegle-style anonymous voice chat app offering random 1-on-1 voice calls with no account required.

- Built a Go (Fiber) back end with a layered architecture (handler, service, repository), a Redis-based matchmaking queue, and session-token anonymity.
- Implemented real-time signaling with a gorilla/websocket hub and self-hosted LiveKit for WebRTC voice calls.
- Developed a React + TypeScript PWA with i18n (Indonesian/English), a report system, and rate limiting.
- Deployed with Docker Compose, Nginx, and Cloudflare Tunnel on a self-managed cloud server.

Tech: Go, Fiber, WebSocket, LiveKit (WebRTC), Redis, PostgreSQL, React, TypeScript, Docker

Nalar — AI Search-Answer Interface

Personal Project | Aug 2026 – Sep 2026 | nalar.wiki

A Perplexity-style search-answer app built on Brave Search's Ask AI, delivering streamed answers with inline citations and rich results.

- Analyzed and documented the Ask AI streaming protocol, then built a Python client for it with `curl_cffi`.
- Built a FastAPI back end that streams answers over SSE, including deep-research mode, entity lookups, and tool results (images, videos, news, shopping, web).
- Developed a React + TypeScript PWA with citation hover cards, SQLite full-text thread search, Markdown/PDF export, and English/Indonesian UI; the public build keeps each visitor's threads in IndexedDB.
- Set up GitHub Actions CI (Ruff, pytest, frontend checks) with automated deployment over a restricted SSH key behind Cloudflare Tunnel.

Tech: Python, FastAPI, SSE, `curl_cffi`, SQLite, React, TypeScript, IndexedDB, Docker, GitHub Actions

WhatsApp Blaster

PT Semesta Arus Teknologi | Mar 2025 – Jul 2025

A production bulk messaging service used by clients for marketing campaigns.

- Built back-end services in Go exposing RESTful APIs for front-end integration and message queue management.
- Implemented redundant message delivery through two back ends, Whatsmeow (WhatsApp Web protocol) and ADB-controlled Android devices, for load distribution.
- Designed a multi-session architecture that runs multiple WhatsApp accounts/devices concurrently for higher throughput and client isolation.
- Deployed on internal infrastructure with Docker and Jenkins CI/CD pipelines.

Tech: Go, Whatsmeow, ADB, Docker, Jenkins

Cybermail — Self-Hosted Temporary Email Service

Personal Project | Feb 2026 – Mar 2026 | cybermail.us

A self-hosted disposable email service with an SMTP server, REST API, and web UI.

- Implemented SMTP ingestion with Haraka (Node.js) and a custom plugin that validates domains before accepting mail.
- Designed multi-layer storage: Redis for temporary inboxes with TTL auto-expiry and PostgreSQL (GORM) for persistent admin data.
- Built a Go + Fiber REST API with JWT admin auth, rate limiting, domain management, MX record verification, and Scalar/Swagger docs, plus a Next.js inbox and admin dashboard.
- Orchestrated all five services with Docker Compose and Cloudflare Tunnel for production deployment.

Tech: Go, Fiber, Haraka, Redis, PostgreSQL, Next.js, Docker Compose

CCTV Monitoring & Video Analytics Platform

Freelance — PT Semesta Arus Teknologi | Aug 2026 – Sep 2026

A self-hosted CCTV monitoring system (VMS) with an operator console for live viewing, AI event triage, recording playback, and fleet health, running on 32 IP cameras.

- Built a Go (Gin, GORM) back end that provisions per-camera ingest containers via the Docker SDK and drives MediaMTX for RTSP ingest, HLS/WebRTC streaming, recording, and playback.
- Developed a Python AI worker with YOLOv8 + ByteTrack for person tracking and event detection (loitering, signal loss, motion), plus face clustering (InceptionResnetV1 + pgvector) and license plate detection with OCR.
- Created a React 19 + TypeScript operator console with a multi-layout live wall, an event triage center, and a 24-hour playback timeline.
- Moved event images (~85% of a 223 GB database) out of PostgreSQL to disk or S3-compatible storage (MinIO) served via presigned URLs, and split detection and viewing streams so the AI keeps 4K frames while browsers receive sub-streams.

Tech: Go, Gin, GORM, MediaMTX, Python, YOLOv8, ByteTrack, PostgreSQL + pgvector, React 19, TypeScript, WebRTC, MinIO, Docker

Other Projects

- **Remo** (Aug 2026 – Sep 2026, askremo.bond): AI chat assistant with streaming, image generation, and file attachments, built on Proton Lumo's API (Bun, Hono, React 19).
- **Remo for Telegram** (Oct 2026, t.me/askremobot): Telegram bot and Mini App for Remo on Telegram Serverless, with answers streamed live in chat, conversations, projects, an image gallery, and a built-in SQLite database, with no server to run (JavaScript, Telegram Bot API, Mini Apps).
- **Self-Hosted RAG System** (Freelance — PT Semesta Arus Teknologi, Jun 2026): Fully offline RAG system that answers questions from users' own documents (LlamaIndex, Ollama, Qdrant, FastAPI, React).

- **Getcontact Scraper** (Nov 2024 – Dec 2025): Distributed Puppeteer scraping workers with a Redis queue, proxy rotation, MongoDB, and a SvelteKit + Socket.IO live dashboard.
 - **Termigo** (Jul 2025 – Nov 2025): Desktop SSH manager with multi-tab sessions, key generation, and OS auto-detection (Go, Wails, Svelte, xterm.js).
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EDUCATION

Dumbways Bootcamp

Full-Stack Web Development Bootcamp | Depok, Indonesia | Graduated: Aug 2023

SMK An-Nahl

Computer and Network Engineering | Cianjur, Indonesia | Graduated: Aug 2017

TECHNICAL SKILLS

- **Backend:** Go (Golang), JavaScript/TypeScript (Node.js, Bun), Python, Gin, Fiber, Hono, FastAPI
- **Frontend:** HTML, CSS, Sass, Tailwind CSS, Bootstrap, React, React Native, Next.js, SvelteKit
- **Databases:** PostgreSQL (pgvector), MySQL, SQLite, MongoDB, Redis, Qdrant
- **AI/ML:** LlamaIndex, Ollama, YOLOv8, ByteTrack, FaceNet (InceptionResnetV1), OpenCV, EasyOCR
- **DevOps & Infrastructure:** Docker, Docker Compose, Jenkins, GitHub Actions, Nginx, Kafka, Kong API Gateway, Cloudflare, MinIO (S3)
- **Streaming & Real-Time:** MediaMTX, LiveKit, WebRTC, WebSocket, RTSP, HLS, FFmpeg
- **Automation:** Selenium, Puppeteer, Playwright
- **Tools:** Visual Studio Code, Zed, Android Studio, Git, DataGrip, Burp Suite, Postman, Notion

SOFT SKILLS

- Problem Solving
- Adaptability
- Effective Communication
- Performance Optimization

LANGUAGES

- Bahasa Indonesia (Native)
- English