Muhammad

Software & AI Engineer | Full Stack · DevOps · AI Agents

Linkedin Github Profile

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Seoul **D-2-7 Visa (Student) · Uzbek Nationality**



PROFESSIONAL SUMMARY

Software & AI Engineer from Uzbekistan, studying Software at Kookmin University as a **Korean Government Scholarship (GKS)** recipient. Built and operated Rebels School and K-Life, Korean learning platforms serving paying students, to address challenges I experienced as a language learner. Owned end-to-end product development, from data modeling and UI/UX design to backend APIs, frontend implementation, testing, and deployment. Implemented paid-content protection, assignment grading, and progress tracking, refining the products through customer feedback. Won 1st place at the Kookmin AI Builder Challenge 2026 as part of a four-person team. I bring hands-on product ownership, collaborative problem-solving, and experience turning real user needs into working software.

LANGUAGES & CERTIFICATIONS

Uzbek	Native billingual proficiency
English / Russian	Professional working proficiency
Korean	**TOPIK Level 5/6** (Advanced) - **SKA (669/800)**

TECHNICAL SKILLS

- **Programming Languages**: TypeScript, JavaScript, Java, Python, PHP.
- **Backend Development & APIs**: Node.js, Express.js, NestJS, Spring Boot, FastAPI, Django; REST APIs, GraphQL; real-time communication with WebSockets and Socket.IO.
- **Frontend Development**: React, Next.js, Angular; Redux Toolkit, React Query; Material UI, Tailwind CSS, Bootstrap, jQuery; Axios and Fetch API.
- **Authentication & Security**: JWT, Passport.js, session-based authentication; password hashing with bcryptjs.
- **AI & LLM Integration**: OpenAI, Anthropic Claude, and Google Gemini APIs; prompt engineering, conversational interfaces, AI-powered data processing and workflow automation.
- **AI Agents & Orchestration**: AI agents, MCP (Model Context Protocol), ReAct workflows, tool calling; AI-driven backend orchestration; Telegram bot development with grammY.
- **Cloud & Infrastructure**: AWS, Google Cloud Platform; Linux server administration, VPS deployment, VPC configuration; DNS and SSL/TLS management with Certbot.
- **DevOps & Application Delivery**: Docker, GitHub Actions CI/CD; NGINX web server and reverse proxy configuration; PM2 process management; Cloudflare security and caching.

EDUCATION

Kookmin University Seoul, South Korea
Bachelor's Degree in Software (소프트웨어융합대학) ***2025 - (in progress)***

PROFESSIONAL EXPERIENCE

Freelance Software Engineer Self-employed | 2025 - Present
Develop end-to-end web platforms and automation systems for clients, from backend APIs and frontend implementation to deployment and maintenance.

Rebels School — *Online Korean Learning Platform*
2026 – Present · Live · rebels.kr

- Built a Korean learning platform independently with NestJS, GraphQL, MongoDB, and a mobile-first Next.js frontend, replacing Telegram-based course delivery for paying students.
- Centralized lessons, homework grading, and progress tracking, with real-time updates through WebSockets.
- Implemented paid-video access protection using Cloudflare Stream and JWT-based dual-token authentication; deployed on a VPS with Docker, NGINX, and Cloudflare.

K-LIFE — *K-Drama-Based Korean Learning Platform*
2026 · Live · k-life.uz

- Built an MVP independently in approximately six weeks using a NestJS GraphQL monorepo and Next.js, turning drama episodes into five skill-building exercises with AI speaking feedback using Groq Whisper and an LLM, plus spaced repetition.
- Resolved 14 critical security issues and reduced background-job database queries from approximately 30,000 to 3 through MongoDB batch queries and indexing.

Pavloniya Choyxonasi — *Tea House Management System*
2026 · Live · pavloniyachoyxonasi.uz

- Replaced paper-based reservations, orders, and billing with a role-based platform for administrators, waiters, and cooks using Next.js, NestJS, GraphQL, and MongoDB; added a real-time kitchen display through WebSockets.
- Enabled Bluetooth thermal receipt printing with server-generated ESC/POS commands and implemented server-side billing calculations to prevent client-side price manipulation.

Kursinfo Premium — *Exchange-Rate Monitoring & Subscription Service*
2026 · Live · @kursinfoagent (Telegram)

- Built a paid Telegram service collecting USD exchange rates from 20 Uzbek banks, including 18 through reverse-engineered official APIs, using Python, asyncio, PostgreSQL, and Redis; implemented primary and fallback data sources without publishing guessed rates.
- Developed a subscription bot with tiered plans and administrator-approved payments, enabling channel access within 12–20 seconds of receipt submission.
- Integrated Groq LLM-generated exchange-rate forecasts with administrator review before publication; deployed with Docker on Railway.

PERSONAL PROJECTS

Ekopechka — *E-commerce Platform*
2025 · Live · ekopechka.uz

- Built an online storefront for a family heating-equipment business using React, Express, MongoDB, and Stripe, enabling customers beyond the local market to place orders.
- Developed an EJS administration panel for product, pricing, and inventory management; connected the store to a Telegram channel with over 2,000 subscribers.
- Deployed on DigitalOcean with Docker, NGINX, and Cloudflare.

Privacy-First Real-Time Face Blur — *Computer Vision Application*
2026 · Personal Project

- Built a real-time Python and OpenCV application that tracks a selected person while blurring other faces to protect bystanders' privacy.
- Implemented a fail-safe that blurs all faces when the selected subject is lost; designed the application to run on a standard laptop.

DOJANG — *International Student Support Platform*
Kookmin AI Builder Challenge 2026 · 1st Place · Live on Link

- Collaborated in a four-person team that won first place at the Kookmin AI Builder Challenge 2026.
- Developed the visa, residence, and health-insurance deadline engine with reminders for international students; initialized the repository and deployed the application on Vercel.

AWARDS & LEADERSHIP

- **Global Korea Scholarship (GKS)** — March 2025: Selected for a fully funded undergraduate scholarship (2025–2029), awarded by the National Institute for International Education (NIIED), Ministry of Education, Republic of Korea.
- **1st Place — Kookmin AI Builder Challenge 2026**: Won with DOJANG as part of a four-person team, Kookmin University.