



Koso Bilegsaikhan

Full-Stack Software Engineer

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Profile

Backend-focused developer with strong experience in Java, systems design, and infrastructure. I build reliable backend services, design clean APIs, and manage deployments with an eye for simplicity and maintainability. While Java is my main tool, I work across the stack when needed, from writing UI components to handling Linux servers and automation.

I value well-structured systems, clear code, and practical solutions. I'm comfortable learning and adapting to new technologies when the problem calls for it. Whether it's trying out a new database or exploring a different framework, I focus on what makes sense for the product and team.

Experience

Full-Stack Software Engineer & DevOps Specialist @ [Freelance](#) 2025-Present

- Found critical scaling issues for Plutio and working on implementing observability into the infrastructure on Google Cloud with Grafana.
- Completed a landing page using PayloadCMS (NextJS) in 2 weeks. Hero animation uses ThreeJS. Used Elevenlabs for in-web chatbot and exposed to the mobile network via Twilio, which takes demo appointments and connects to Pipedrive CMS.

Full-Stack Software Engineer @ [Unitel LLC](#) 2023-2025

- Built Call Center SaaS where I developed a no-code tool to automate workflows, designing both the frontend and backend portions to efficiently manage incoming and outgoing calls. Used React, Java and Asterisk PBX.
- Created Data Pipeline with TimescaleDB (Postgres), Apache Kafka and in-house ETL tool I developed in Java, alongside a dashboard viewer based in React similar to Apache Superset.
- Created Face Validation Pipeline for on-site branches of the company with Java and Amazon Rekognition, handling 100,000+ monthly verifications.
- Built business logic-heavy SMS services that connected users with telecom services.
- Setup production-ready, high-availability Kubernetes cluster with metrics in Prometheus + Grafana stack.

- Provided software consultation to affiliate organizations on adoption and deployment of an in-app call feature, leveraging previous experience with the SIP Protocol. Codebase was in Golang.
- Also Linux Sysadmin stuff.

Software Engineer @ [Digital Solutions](#) 2022 - 2023

- Developed a Media Streaming tool that ensures synchronized playback across all game instances in a multiplayer environment, serving over 5,000 users. This allowed for virtual meetings within the meta-verse.
- Implemented a custom, optimized Linked List to power a sorting algorithm that tracks multiple instances of the same mesh, improving rendering performance. This reduced system requirements significantly, allowing for mobile devices to join the meta-verse.

Research Assistant | Lab Manager @ [National University of Mongolia](#) 2021 - 2023

- Led a team of 6 students to deliver multiple small-scale projects, coordinating development, code reviews, and deployment.
- Created a miniature render engine using Vulkan, demonstrating strong low-level graphics programming skills.
- Built a motion-controlled interactive game for Microsoft Kinect, developed in Unreal Engine 4.
- Prototyped a virtual classroom in Unreal Engine 4, where students can interact with virtual objects to simulate physical formulas, blending educational technology with interactive gameplay mechanics.

Full-Stack Engineer @ [Freelance](#) 2021 - 2022

- Worked on multiple small, static websites for local businesses using HTML, CSS and JQuery. Started using Headless Wordpress after a few months and gradually moved on to use React/NextJS and Firebase.
- Sometimes had to build small backends in Django or Express.
- Built Traffic Test app on Android/iOS using Flutter.

Projects

[Plutio Observability](#) 2025

- Currently working on improving Plutio's infrastructure by adding observability with Grafana.

[Primax AI | Landing Page](#) 2025

- Developed a modern landing page with [PayloadCMS \(Next.js\)](#), featuring a [ThreeJS](#) hero animation and integrated [Elevenlabs](#) chatbot.
- Connected chatbot to [Twilio](#) and [Pipedrive](#) for automated demo scheduling.

Call Center SaaS 2023-2025

- Created a no-code workflow automation tool for call centers, including frontend ([React](#)) and backend ([Java](#), [Asterisk PBX](#)) components.

- Built a data pipeline with [TimescaleDB](#), [Kafka](#), and a custom Java ETL tool, plus a React-based dashboard viewer.
- Built in micro-service architecture for scalability and maintainability.

[Face Validation Pipeline](#) 2023

- Developed a face validation system for on-site branches using [Java](#) and [Amazon Rekognition](#), processing 100,000+ verifications monthly.

Education

Master of IT in Artificial Intelligence - [Macquarie University](#) 2025 - Present

Currently pursuing advanced studies in artificial intelligence, focusing on machine learning, data science, and intelligent systems.

B.Sc. in Computer Science - [National University of Mongolia](#) 2020 - 2023

Completed a 4-year Bachelor's in Computer Science in 3 years. Thesis on modular architecture for motion-based games enabling rapid integration of diverse motion controllers.

Skills

Java Quarkus Spring Boot Javascript React Angular Next.js
Tailwind CSS Python Django Golang SQL Git Docker
Kubernetes AWS Node.js TypeScript Grafana Prometheus
Gitlab CI/CD Linux