

Bilegjargal (Bek) Jargalsaikhan - Senior Software Engineer

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Professional Summary

Senior Software Engineer with 7+ years of experience building and operating large-scale, customer-facing and internal platforms using modern web and backend technologies. Strong background in designing and implementing RESTful APIs, microservices, and distributed systems on cloud infrastructure. Experienced in building self-serve user experiences, internal operational tools, and automation systems that streamline complex workflows. Hands-on experience integrating AI-assisted and LLM-driven features, orchestrating automation using tools such as n8n, and connecting external systems including payment gateways, identity providers, and third-party APIs. Proven ability to own features end-to-end, collaborate cross-functionally with product, design, and operations, and ship reliable systems iteratively in ambiguous problem spaces

Skills

Languages: JavaScript (ES6+), TypeScript, Java, Python, SQL

Front-End: React, Next.js, Redux, ContextAPI, Tailwind CSS, SWC(Speedy-Web-Compiler)

Back-End: Fastify, Node.js, Express, Java, Spring Boot, Python, REST, GraphQL

AI, Agentic Systems & Automation: Agentic software development, LLM integration and customization, rule-based and prompt-driven orchestration, Retrieval-Augmented Generation (RAG), embedding-based knowledge search, human-in-the-loop workflows, voice and chat automation, n8n workflow automation

Cloud & DevOps: AWS (Cloudformation, EC2, S3, Lambda), Docker, Vercel, Supabase, GitHub Actions

Databases: PostgreSQL, MongoDB, Redis, MySQL

Testing & Tools: Vitest, Cypress, Playwright, Jest, Selenium, test-driven development, performance and reliability testing, OpenCode, OpenAI API, embedding pipelines, n8n, Datadog, GitHub

Professional Experience

[Lantuun Dohio USA \(NPO\) - Senior Software Engineer](#)

Sept 2025-Present

- Designed and implemented a voice-based customer engagement system that provides donors with organization information and supports follow-up call scheduling
- Built a lightweight RAG (Retrieval-Augmented Generation) pipeline to ingest and embed organizational knowledge, enabling accurate, context-aware responses during voice interactions
- Integrated a phone number and voice receptionist workflow to handle inbound inquiries, reduce manual follow-up, and guide potential donors through next steps
- Developed AI-driven conversational logic to answer questions dynamically based on embedded knowledge rather than hardcoded responses

- Implemented scheduling workflows to route interested callers to human follow-up when additional context or discussion was required
- Collaborated with non-technical stakeholders to define conversational flows, knowledge boundaries, and escalation criteria for voice-based support

The Washington Post - Software Engineer

June 2021-January 2025

- Designed and maintained large-scale distributed systems and customer-facing applications supporting high-traffic publishing workflows
- Developed and operated microservices and APIs using Java Spring Boot, Node.js, and Python, deployed on AWS cloud infrastructure
- Built internal tools and platform services used by editorial and operational teams to manage content workflows at scale
- Collaborated with product, design, data, and operations partners to deliver features that improved internal efficiency and end-user experience
- Integrated backend services with data pipelines, messaging systems, and external APIs to support complex asynchronous workflows
- Analyzed system performance, logs, and metrics to identify reliability issues, automation opportunities, and cost optimizations
- Contributed to architectural decisions, code reviews, and documentation within a large, long-lived codebase

Grainger - Software Engineer

March 2020-June 2021

- Built and maintained customer-facing and internal web applications using React, Redux, and Node.js
- Developed backend services and APIs to support device management and operational workflows
- Integrated systems using messaging protocols and external services to support distributed, event-driven behavior
- Focused on performance and reliability in applications operating under constrained hardware and network environments
- Collaborated cross-functionally to deliver features aligned with both user experience and operational requirements.

Hub Group - Software Engineer

July 2019-March 2020

- Developed web application features using Angular and Node.js to support customer and operational workflows
- Built and integrated RESTful APIs supporting address validation, data enrichment, and third-party service interactions

- Collaborated with product and engineering teams to deliver iterative improvements to customer-facing systems
- Improved system efficiency and robustness through targeted optimization and workflow refinement

ITZONE - Software Engineer

September 2016-August 2018

- Built ERP system modules (CRM and SCM) using ASP.NET and Ext.JS to improve business operations.
- Designed and implemented RDBMS schema for financial transaction features in Oracle DB, ensuring data integrity and scalability.
- Led front-end migration from Ext.JS to React, modernizing the interface and improving maintainability.

Education

M.S. in Computer Science – Maharishi International University, 2018 – 2020

B.S. in Computer Science – Mongolian University of Science and Technology, 2012 – 2016