

Bilegjargal (Bek) Jargalsaikhan

Senior Full-Stack Engineer

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SUMMARY

Senior full-stack engineer with 7+ years shipping production systems at scale — including 3.5 years at The Washington Post building internal tools used daily by ~25,000 editorial and operational users globally. Strong across TypeScript on both ends of the stack (Angular + Node.js), with hands-on ownership of Playwright E2E suites, Jest unit testing, and GitHub Actions/Jenkins CI/CD pipelines. Currently co-founding an AI voice agent platform and actively building with modern agentic tooling. Known for owning features end-to-end, mentoring engineers, and driving architectural decisions in long-lived codebases.

CORE SKILLS

Front-End: Angular, TypeScript, RxJS, Reactive Forms, Tailwind CSS, Next.js, React

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

Testing: Playwright (E2E), Jest (unit/integration), Cypress, TDD

CI/CD & Cloud: GitHub Actions, Jenkins, Docker, AWS (EC2, S3, Lambda, CloudFormation, Terraform)

Databases: PostgreSQL, MongoDB, Redis, MySQL

AI & Automation: LLM integrations, RAG pipelines, voice agents, OpenAI API, n8n

EXPERIENCE

Co-Founder & Engineering Lead | NewCoreLab (newcorelab.com)

Nov 2024 – Present

Washington, DC

- Co-founding an AI agent platform for small and mid-sized businesses, building voice receptionists, chatbot agents, and workflow automation that let SMBs capture every call, qualify every lead, and operate 24/7 without enterprise-scale headcount.
- Leading development of Tsuur.ai, the flagship voice product, captures missed inbound calls, qualifies leads, and generates prioritized callback queues for sales teams, with an initial focus on home services (HVAC, roofing, specialty trades).
- Architected and built the platform end-to-end on Next.js, TypeScript, and Supabase (PostgreSQL) with a Fastify.js back end and owning voice agent orchestration (VAPI), RAG-based knowledge retrieval, CRM integrations (HubSpot, Salesforce), dashboards, billing, and onboarding flows.
- Designed multi-agent Claude Code pipelines and subagent workflows (code, review, docs, tests, audit) to accelerate iteration velocity and maintain code quality as a small founding team.
- Leading early customer development and go-to-market strategy alongside a co-founder with deep industry connections in target verticals.

Software Engineer | The Washington Post

June 2021 – January 2025

Washington, DC

- Built and maintained Angular, React + TypeScript editorial tooling inside Arc XP, The Washington Post's digital publishing platform — used daily by ~25,000 editorial and operational users across global bureaus, and powering 2,000+ sites and 2B+ monthly readers worldwide (including Reuters, Boston Globe, Le Parisien, Irish Times).
- Owned Playwright E2E test coverage for critical editorial UI flows, stabilizing previously flaky suites through network mocking, deterministic waits, and test isolation — wiring them into CI to gate deployments.

- Wrote extensive Jest unit and integration tests across Angular components/services and Node.js business logic, raising coverage on critical paths and enforcing contracts between front-end and back-end teams.
- Modified and extended CI/CD pipelines in GitHub Actions and Jenkins — adding parallelization, caching, and Playwright E2E gates that meaningfully reduced PR feedback time for the team.
- Mentored junior engineers through code reviews, pairing sessions, and onboarding documentation; drove architectural decisions on service boundaries, testing strategy, and front-end state management patterns.
- Partnered with product, design, and data teams to translate ambiguous editorial requirements into shipped features, using Datadog metrics and logs to validate impact and identify reliability issues post-launch.

Software Engineer | Grainger

March 2020 – June 2021

Chicago, IL

- Built customer-facing and internal web applications in Angular, TypeScript, and Node.js (Express), backed by PostgreSQL and Redis.
- Developed REST APIs supporting device management and operational workflows in constrained hardware and network environments.
- Wrote Jest unit tests and contributed to integration test coverage to improve reliability of back-end services.

Software Engineer | Hub Group

July 2019 – March 2020

Chicago, IL

- Developed Angular and Node.js features supporting customer and operational workflows for a major logistics provider.
- Built and integrated REST APIs for address validation, data enrichment, and third-party service orchestration.

Software Engineer | ITZONE

September 2016 – August 2018

Ulaanbaatar, Mongolia

- Built CRM and SCM modules of an enterprise ERP system using ASP.NET and Ext.JS.
- Led front-end migration from Ext.JS to React, modernizing the interface and improving maintainability.
- Designed Oracle DB schema for financial transaction features, ensuring data integrity and scalability.

SELECTED CONTRACT WORK

Contract Full-Stack Engineer | Lantuun Dohio USA (Nonprofit)

2024 – Present

Remote

- Designed and built an end-to-end donor management platform used by NGO staff to track donor contributions, log outreach activity, and manage relationships across the full donor lifecycle.
- Integrated Stripe, Givebutter, and WooCommerce to consolidate contribution data from multiple channels into a single system of record, with automated reporting for finance and leadership.
- Built an in-app email system enabling staff to send marketing campaigns and weekly operations updates directly from the platform, removing dependency on external tools.
- Automated annual tax letter generation and delivery during tax season, eliminating hours of manual work and reducing errors in donor-facing acknowledgments.
- Built a voice agent system with a RAG pipeline over organizational knowledge to handle inbound donor inquiries and route qualified leads to human follow-up.

EDUCATION

M.S. Computer Science — Maharishi International University

2018 – 2020

B.S. Computer Science — Mongolian University of Science and Technology

2012 – 2016