

# Derek D. Kim

Full-Stack & AI Engineer

(847) 809-1416 | daejung1@gmail.com | linkedin.com/in/derek-d-kim

derekkim.dev | rep-forge.com | lotlytics.us | GitHub

Abilene, TX

## Summary

Full-stack engineer who ships AI-powered products from zero to production. 4 live projects spanning real estate analytics, autonomous DevOps agents, AI coaching, and persistent memory systems. Builds across the entire stack — LLM pipelines, data platforms, real-time systems, and everything in between.

## Selected Projects

### Nerve — AI DevOps Platform

2025–Present

Python, FastAPI, MCP, Claude Code

- Built an autonomous DevOps platform orchestrating 14 AI agents across development, security, and marketing on automated 3-hour cycles.
- Agents perform code review, vulnerability scanning, uptime monitoring, and content generation with zero manual intervention.

### Lotlytics — Real Estate Analytics Platform

2024–Present

Next.js, TypeScript, FastAPI, PostgreSQL, TailwindCSS, Vercel

- Built and launched a market intelligence platform aggregating 9+ data sources including crime trends across 939 U.S. markets and 21,000+ ZIP codes.
- Integrated tiered subscription billing, developer API with key-based auth and rate limiting, and automated SEO content pipeline.

### Cortex — Persistent AI Memory (Open Source)

2025–Present

Python, FastAPI, MCP, PyPI

- Built an open-source persistent memory layer for AI tools — works across Claude, Cursor, Windsurf, and any MCP client.
- Auto-curation agent distills sessions into long-term memory; all data stored as plain markdown the user owns.

### RepForge — AI Bodybuilding Coach SaaS

2024–Present

Next.js, TypeScript, FastAPI, PostgreSQL, Cloudflare R2, Stripe, GPT-5

- Built a full-stack AI coaching platform delivering personalized nutrition and training plans with weekly check-in analysis powered by GPT-5.
- Designed a human-in-the-loop workflow enabling coaches to manage 5× more clients; implemented subscription billing and the end-to-end AI recommendation pipeline.

### Nythera MMO — Custom Multiplayer Engine

2024–Present

C++20, OpenGL, GLFW, GLM, ImGui, spdlog, vcpkg

- Engineered a custom C++20 game engine with OpenGL rendering, skinned animation, PBR materials, and particle systems.
- Built multiplayer networking, combat systems, procedural terrain, and a runtime level editor.

## Experience

### Software Developer

2023–Present

SCB Consulting

Remote

- Design and deliver full-stack software solutions, including APIs, backend services, database schemas, and production web applications.

### Freelance Software Developer

2020–2023

DDK Holdings

Champaign, IL

- Built custom applications and backend systems for small business clients, managing the full lifecycle from scoping through deployment.

### Founder

2017–2020

Fittora

Champaign, IL

- Built a geo-fenced fitness marketplace connecting trainers, clients, and gyms, reaching 75–100 daily active users with approximately 25% paid conversion.
- Developed the cross-platform mobile application in React Native and implemented payment workflows for trainers and gyms.

### NBC Specialist

Military Service

U.S. Army

Fort Leonard Wood, Missouri

## Technical Skills

**Languages:** JavaScript, TypeScript, Python, C++, C#, SQL    **Frameworks:** React, Next.js, React Native, Angular, FastAPI, Node.js

**Data & Infra:** PostgreSQL, MongoDB, Redis, Docker, AWS, Vercel, Railway, Cloudflare R2    **AI & APIs:** OpenAI API, Claude API, MCP, LLM Pipelines, Stripe, Git, TailwindCSS

**Domains:** LLM pipelines, real-time networking, OpenGL rendering, multi-source data platforms, SaaS billing & auth

**Education:** B.S. in Computer Science — University of Illinois Urbana-Champaign

Dec 2017