

# Brian E. Kane

Full-Stack AI Engineer | Senior Software Engineer | Healthcare Technology

River Ranch, FL | Remote Only | [BrianEKane.com](http://BrianEKane.com) | [github.com/bkane56](https://github.com/bkane56) | [linkedin.com/in/brian-kane-396a8862](https://linkedin.com/in/brian-kane-396a8862)

## BEST FIT

Full-Stack AI Engineer  
Applied AI Engineer  
Senior Software Engineer  
Healthcare AI / Product Engineering

## CORE STACK

**AI:** LLM apps, RAG, embeddings, vector DBs, agentic workflows, MCP tooling, prompt/context engineering

**Frontend:** React, Next.js, TypeScript, JavaScript, React Router, Redux, Tailwind, accessibility

**Backend:** Java, Spring Boot, REST APIs, Python, FastAPI, Pydantic, OAuth2, Maven, JUnit

**Cloud:** AWS, Docker, Terraform, CI/CD, Vercel, Render, PCF-to-AWS migration

## DIFFERENTIATORS

11 years enterprise software delivery

25-year clinical healthcare background

Mentored 10-15 engineers

Production-minded AI builder, not just prompt demos

## EDUCATION

Diplomate, American Board of Chiropractic Neurology

Doctor of Chiropractic - Logan University

B.S. Human Anatomy; B.S. Human Biology - Logan University

B.S. Zoology, minors in Physics and Chemistry - Eastern Illinois University

## Professional Summary

Senior full-stack software engineer with 11 years of enterprise delivery experience and a current focus on applied AI systems, LLM applications, RAG, agentic workflows, and AI-enabled product development. Former healthcare practitioner and clinical neurology practice leader with deep experience in patient care, healthcare operations, and multidisciplinary collaboration. Strongest fit: teams that need a production engineer who can build useful AI software across frontend, backend, cloud, and healthcare-aware workflows.

**I bring production software discipline to applied AI: shipping systems that are usable, testable, maintainable, and grounded in real-world workflows.**

## Selected AI & Full-Stack Projects

### AI Digital Twin

#### Portfolio AI Assistant | Full-Stack AI Application

- Built a live conversational AI assistant grounded in professional background, resume content, project summaries, and curated context.
- Demonstrates practical AI product architecture using FastAPI, cloud-hosted model inference, conversation memory, and a browser-based frontend.
- **Tech:** Next.js, React, TypeScript, Python, FastAPI, AWS Bedrock, Amazon Nova, Terraform, S3, GitHub Actions.

### The Hallucination Tribunal

#### RAG Document Assistant | Multi-Agent Verification Workflow

- Designed a RAG assistant with Witness, Prosecutor, and Judge roles to separate answer generation, claim challenge, and final verdict.
- Shows retrieval, citation-aware responses, claim-level review, adversarial evaluation, and reliability-focused AI behavior.
- **Tech:** Next.js, TypeScript, Python, FastAPI, ChromaDB, hybrid retrieval, OpenAI, optional Ollama, Vercel, Render.

### MediNotes Pro

#### Healthcare-Focused AI Documentation Assistant

- Built a healthcare-oriented AI assistant that transforms consultation notes into structured summaries, next steps, and patient-friendly communication.
- Designed around synthetic data and private containerized inference to demonstrate PHI/PII-aware architecture choices.
- **Tech:** Next.js, React, TypeScript, FastAPI, Python, Docker, Ollama, Clerk, SSE streaming, Vercel, Render.

## Professional Experience

### Express Scripts / The Cigna Group / Evernorth | October 2015 - May 2026

#### Software Advisor | Senior Software Analyst | Software Analyst | Intern

- Selected as one of eight engineers chosen to help lead modernization of the Express Scripts consumer-facing web platform into a React and Java/Spring-based architecture.
- Built and enhanced customer-facing features for Order Status, Automatic Refill, Delivery Date Changes, and Over-the-Counter Medications.
- Helped improve page load performance by approximately 20%, reduce errors by 25%, increase digital usage by 30-40%, and contribute to a 30% reduction in phone-based orders.

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## AI DEVELOPMENT

The Complete Agentic AI Engineering Course

AI Engineer Core Track: LLM Engineering, RAG, QLoRA, Agents

AI Builder with n8n: Create Agents & Voice Agents

AI Engineer Production Track: Deploy LLMs & Agents at Scale

AI Coder: Vibe Coder to Agentic Engineer

## HEALTHCARE DOMAINS

Clinical documentation

Patient-facing communication

Pharmacy and insurance workflows

Care operations and multidisciplinary clinics

## WORKING STYLE

Practical, energetic, direct, and collaborative. Serious about engineering quality; not allergic to humor.

## Professional Experience, Continued

### Express Scripts / The Cigna Group / Evernorth

- Worked across frontend, backend, API, and integration layers using React, React Router, Redux, JavaScript, TypeScript, Java, Spring Boot, REST APIs, Maven, JUnit, OAuth2, and Hibernate.
- Contributed to application and infrastructure migration from Pivotal Cloud Foundry to AWS, strengthening cloud deployment, scalability, and production operations experience.
- Helped establish front-end component patterns, implementation standards, and accessible user experiences meeting A11y testing requirements.
- Trained and mentored 10-15 junior and mid-level engineers in React and Java-based full-stack development.
- Partnered daily with business stakeholders, translated requirements into production-ready software, and contributed to architecture decisions within a large-scale healthcare environment.

### Applied AI & Agentic Engineering

- Built hands-on AI workflows using OpenAI models, LLM orchestration, RAG, vector databases, MCP-based tooling, prompt engineering, context engineering, and autonomous task workflows.
- Developed practical experience with tool-using agents, multi-step orchestration, retrieval pipelines, evaluation-oriented iteration, and deployment-minded AI patterns.
- Focused on building AI systems that are useful, explainable, maintainable, and more reliable than generic chatbot demos.

### Prior Healthcare Leadership

#### Clinical Practice / Chiropractic Neurology | 1984 - 2014

#### Chiropractic Physician | Clinical Neurology Practice Leader | Solo Practitioner

- Practiced in healthcare across solo practice and a large multidisciplinary clinical environment.
- Served in a clinical neurology leadership role, collaborating across disciplines and working with complex patient-care workflows.
- Built deep experience in clinical reasoning, patient communication, documentation, healthcare operations, and interdisciplinary collaboration.
- Developed early hands-on technical experience by networking clinic systems and supporting operational technology needs before transitioning fully into software engineering.
- Brings domain credibility to AI, clinical documentation, patient-facing systems, insurance, pharmacy, and healthtech software.

### Additional Education

Additional graduate study in recombinant genetics. Recent professional development includes agentic AI engineering, RAG, QLoRA, production AI engineering, n8n agents, voice agents, and AI-assisted development workflows.