

# PRAVEEN ANTONY

**Principal Software Engineer | Technical Lead | AI Systems Architect**

Location: Apex, NC | Phone: 469-231-8419

[LinkedIn](#) | [Portfolio](#) | [GitHub](#)

---

## PROFESSIONAL SUMMARY

- **Principal Software Engineer** with 17+ years of experience architecting enterprise-scale platforms across distributed systems, cloud-native architectures, and AI-driven applications.
  - **AI Systems Specialist:** Expert in production-grade agentic AI, multi-agent orchestration (LangGraph), and enterprise RAG solutions with a focus on guardrails and reliability engineering.
  - **Technical Leader:** Proven track record of leading high-performing teams (8+ engineers) and driving technical strategy for Fortune 500 financial and information services.
  - **Full-Stack Architect:** Deep expertise in Java/Spring Boot, AWS, Kubernetes, and secure API engineering, bridged with modern AI/ML integration.
- 

## TECHNICAL SKILLS

- **AI & Agentic Engineering:** LangGraph, LangChain v0.3, Multi-Agent Orchestration, RAG Pipelines, Vector Stores (FAISS), OpenAI Agents SDK, CrewAI, MCP.
- **AI Security & Ops:** Prompt Security, Guardrails, OpenTelemetry, Token-Budget Governance, Circuit Breakers.
- **Architecture: GraphQL & Monorepo Champion (Nx),** Cloud-Native Microservices, Event-Driven Design, Distributed Systems, API Strategy.
- **Backend & Cloud:** Java 17/21+, Spring Boot, Node.js, **AWS (Certified)**, Docker, Kubernetes (**EKS**), PostgreSQL, MongoDB.
- **Frontend & Mobile:** Angular, React, React Native, TypeScript, Tailwind CSS, PWA Development.
- **DevOps & Security:** CI/CD (GitLab/Jenkins), OAuth2/OIDC, JWT, Datadog, Splunk, OWASP.

# AI & AGENTIC ENGINEERING PROJECTS

## **LeapDev AI Platform** — *Autonomous Developer Agent Platform*

- Architected end-to-end system taking Jira stories through task planning, code generation, multi-agent review, CI/CD execution, and PR creation.
- Implemented isolated Docker sandbox execution (no network access), token-budget governance, circuit breakers, and prompt-injection sanitization.

## **ConfluxAI** — *Enterprise RAG Search Copilot*

- Developed natural-language query interface for Confluence using LangGraph for multi-turn clarification and FAISS for vector storage.
- Designed Angular-based answer panel with source-card citations, feedback loop, and analytics dashboard for continuous model tuning.

## **FlowPilot** — *MCP-Powered Incident Response Agent*

- Automated incident lifecycles across ServiceNow and Jira using a LangGraph state machine with human-in-the-loop approval gates.

## **DealScoutAI** — *AI-Powered Deal Intelligence Platform*

- Automatically extracts, categorizes, and analyzes sales deals from emails, calendars, and CRM data using NLP and classification pipelines.

## **Bedtime Story Architect** — *Multimodal AI Story Generation PWA*

- Built an AI-driven progressive web app generating personalized narrated and illustrated bedtime stories in real-time for children.
- Integrated multimodal LLM outputs with text-to-speech and image generation for complete story experiences.

## **Fifty Six Card Game** — *AI Bot Gameplay Simulation Engine*

- Rebuilt classic 6-player South Indian card game as online PWA with full rules engine and AI bots.
- Engineered AI opponents replicating human-like strategic gameplay using decision trees and probabilistic modeling.

# PROFESSIONAL EXPERIENCE

## Fidelity Investments | Principal Software Engineer / Technical Lead

*June 2023 – Present | Raleigh, NC*

- **Engineering Leadership:** Lead technical direction for a cross-functional team of **8 engineers**; driving architecture, design, and end-to-end delivery of mission-critical market data platforms.
- **Modernization Champion:** Leading the transformation of legacy monoliths into **Cloud-Native containerized services** (AWS/EKS), resulting in improved scalability and reduced infrastructure overhead.
- **Architectural Governance:** Establish enterprise API standards for **security, observability, and rate limiting**; implementing **OAuth2, OIDC, and JWT** to secure high-volume financial workflows.
- **GraphQL & Monorepo Champion:** Driving the adoption of **GraphQL** for unified data fetching and managing the transition to **Monorepo architecture** to streamline developer velocity and shared component governance.
- **Full-Stack Innovation:** Architecting secure, scalable applications using **Java, Spring Boot, Angular, and AWS**, supporting mission-critical services for millions of customers.
- **Security & Resilience:** Enforcing **OWASP controls**, input validation, and encryption patterns for data-at-rest/transit to meet stringent fintech compliance requirements.
- **DevOps & Mentorship:** Optimizing **CI/CD pipelines** (Jenkins, GitLab, Docker) and driving engineering excellence through technical mentoring and rigorous code review standards.

## EBSCO Information Services | Senior Software Engineer II

*March 2017 – June 2023*

- **Full-Stack Delivery:** Contributed to the design and operation of high-traffic services for global enterprise web products.
- **Modernization PoCs:** Conducted deep-dive technology research and **Proof of Concept (PoC)** initiatives that defined the strategic direction for system enhancements.
- **Quality Engineering:** Defined and inspected critical **quality gates** within deployment pipelines to ensure zero-defect production releases.

## Randstad Technologies | Senior Software Developer / UI Developer

September 2014 – March 2017 | Clients: Fidelity Investments, Ally Financial

- **Technical Governance:** Served on the **Technical Review Board**, auditing architectural artifacts and providing approvals for enterprise-wide design implementations.
- **UI Engineering:** Led frontend development using **JavaScript (ES6+), HTML5, and CSS3**, with a primary focus on building scalable **Angular** components.
- **Node.js Integration:** Engineered custom, enterprise-grade **Node.js** applications using the **Sails.js** framework.

## Kforce Inc | Senior UI Developer

October 2013 – September 2014 | Client: Sparta Systems

- **Responsive Architecture:** Developed high-quality, cross-browser compatible applications using **Backbone.js, jQuery, and Bootstrap**.
- **Test-Driven Development:** Defined and implemented **Behavior-Driven Development (BDD)** strategies, delivering automated “hands-free” demos of tested stories.

## Infosys Ltd | Technology Analyst

September 2008 – October 2013 | Clients: AT&T, SetLabs

- **System Design:** Focused on **RESTful Web Services**, XML/JSON, and secure HTTP/SSL protocols for large-scale software systems.
- **Portal Engineering:** Developed **JSR 286 Portlets** and custom themes using **IBM Rational Application Developer**.

## EDUCATION & CERTIFICATIONS

**B.Tech, Computer Science & Engineering · AWS Solutions Architect – Associate · SAFe Certified**