KARTIK SHANBHAG

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SUMMARY

Emerging software engineer specializing in **full stack development**, with a passion for **AI-driven solutions and cloud computing**. Certified **AWS Cloud Practitioner** and **recipient of the Best AI Implementation award** at Boston University's CivicHacks hackathon.

EDUCATION

Northeastern University, Boston, MA   **Aug 2025**
Master of Science in Computer Software Engineering
Relevant Courses: Object-Oriented Design in Java, Intro to AI Agentic Infrastructure, Web Design and User Experience
University of Mumbai, Mumbai, India   **May 2023**
Bachelor of Engineering in Electronics

EXPERIENCE

Software Engineering Co-op | *Tech Stack: Python, OpenAI, React.js, TypeScript, Pinecone, PostgreSQL*   **Jan 2025 - Apr 2025**
Indra Solutions LLC, San Ramon, CA

- Owned the backend development of an **AI-powered contract intelligence** platform that enables businesses to seamlessly discover, analyze, and respond to federal contracts through an intuitive **React.js** dashboard.
- Architected a robust pipeline leveraging GitHub Actions to automate daily contract fetching, storing data in Postgres and indexing it in Pinecone using Hugging Face sentence transformers, enabling **LLM-powered semantic search** with OpenAI.
- Developed a **RAG-powered AI Assistant** that evaluates opportunities using user profiles and uploaded documents. Designed the Python based backend architecture with 20+ APIs for data processing and retrieval.
- Implemented **intelligent match score analysis** for contracts, providing personalized recommendations. Devised **caching** with Redis Insight, optimizing response times and demonstrating scalable AI powered app development.

Software Engineering Intern | *Tech Stack: HTML, CSS, JavaScript, Node.js, Jenkins, MYSQL*   **Jun 2022 - Aug 2022**
C-Edge Technologies, Mumbai, MH

- Prototyped proof-of-concept for the **overhaul of a digital payments application**, revamping transaction interface with HTML/CSS and JavaScript based frontend with MYSQL serving as the primary database.
- Deployed the **payment processing services** with 10+ RESTful APIs using Node.js and automated the **deployment pipelines** with Jenkins **CI/CD** and Docker for efficient releases.

ACADEMIC PROJECTS

PoliSightsAI | *Tech Stack: React.js, Airflow, Snowflake, Docker, Python, FastAPI*   **Feb 2025 - May 2025**

- Delivered an **AI-powered policy tracking platform** for small businesses, automating policy extraction, classification, and personalized recommendations through an Airflow ETL pipeline that preprocesses legal text with NLP models and stores data in Snowflake and Pinecone, supported by a FastAPI backend with RAG and vector search for **real-time compliance insights**.

PatientPro HealthCare Systems | *Tech Stack : SQL Server Management, Microsoft PowerBi, Draw.io*   **Jan 2024 - Apr 2024**

- Constructed an **end-to-end secure healthcare management system** with encrypted SQL Server database, automated workflows via triggers and stored procedures, and interactive PowerBI analytics dashboards, resulting in a **20%** reduction in patient no-show rates.

PledgePilot | *Tech Stack : React.js, MongoDB, Express.js, Node.js, Git, RESTAPI*   **Sep 2023 - Dec 2023**

- Engineered a **responsive web application** that gamifies tech campaign fundraising, featuring an engaging React.js interface with 25+ interactive components. Crafted a seamless donor experience with an Express.js backend, RESTful APIs, and Stripe integration, allowing contributors to earn rewards. Ensured **reliability and scalability** through NOSQL data management.

ClassCoordinator | *Tech Stack : Java, Auth0, React.js, SpringBoot, Postman*   **Sep 2023 - Dec 2023**

- Built a responsive course management web app with **Auth0-based authentication** for students, instructors, and TAs, featuring a discussion portal for 50+ users and a Java SpringBoot backend architected with microservices and **SOLID-aligned design patterns** for maintainable, efficient code.

TECHNICAL SKILLS

Programming Languages: Java (object-oriented programming), Python, JavaScript, TypeScript
Web Development and Tools: HTML5, CSS, React.js, REST, Spring Boot, Node.js, PowerBI, Postman, Microsoft 365
Databases and Version control: SQL Server Management, MYSQL, MongoDB, GitHub, Jenkins CI/ CD, Docker