Gokulnaath Govindaraj

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EDUCATION

Master of Science, Computer Science | **Wright State University** **December 2025**
Bachelor's in Mechatronics Engineering | **Anna University** **April 2022**

SKILLS

Languages: Python, JavaScript, TypeScript, Java, SQL
Libraries: Scikit-Learn, Pandas, NumPy, PyTorch, Playwright.
Frameworks: Spring Boot, Flask, Node.js/Express, React, Next.js (App Router), Tailwind CSS.
Tools & Technologies: Docker, Git, GitLab CI/CD, AWS RDS, Railway, Postman, Jira.
Databases: PostgreSQL, MongoDB, Weaviate.

EXPERIENCE

AriesView, Boston, MA
Software Engineer – Intern **August 2025 – Present**

- Built and containerized a Flask financial-calculation microservice with modular computation components and Swagger/OpenAPI docs, cutting developer setup time by 30-40% and improving maintainability.
- Delivered a Financial Hub UI using Next.js, React, and TypeScript, strengthening state management and data flow to improve responsiveness by 25% and reduce UI regressions during feature releases.
- Designed and implemented Node.js/Express REST APIs backed by PostgreSQL, adding input validation and transactional upserts to support 500+ requests and reduce inconsistent saves by 90%.
- Integrated RAG outputs into the product experience by surfacing grounded answers with citations and retrieved context, lowering fallback errors by 30% for analyst-facing financial and lease queries.
- Built end-to-end document intelligence workflows with OCR ingestion, document-aware chunking, embeddings, and hybrid retrieval to improve answer accuracy for numeric and clause-sensitive document questions.
- Evaluated locally hosted and API-based LLMs for accuracy, latency, and reliability, tuning retrieval and generation behavior to minimize hallucinations and improve consistency in production-style testing.

Accelerate UConn NSF I-Corps Program, Hartford, CT
Technical Contributor **August 2024 – September 2024**

- Defined technical requirements and backend architecture for a peer-mentoring platform, aligning product needs with a Spring Boot implementation plan and API-first design for scalable feature delivery.
- Led development direction for an LLM chatbot using prompt engineering and Spring AI integration, improving review clarity and team execution by producing implementation notes that raised code review efficiency by 15%.

Porter Lee Corporation, Schaumburg, IL
Programming Intern **May 2024 – August 2024**

- Engineered RESTful API endpoints (GET, POST, PUT, DELETE) for an Android Evidence Management System, optimizing JSON payload handling to improve mobile data refresh speed by 20%.
- Implemented JWT-based authentication and asynchronous background operations with multithreading to prevent UI blocking, enabling reliable automated sync cycles and improving refresh consistency by 20%.
- Created clear developer documentation for 5 core API endpoints, reducing onboarding time for new engineers by 35% through faster integration and fewer implementation questions.

Cognizant Technology Solutions, Chennai, TN, India
Programmer Analyst Trainee **September 2022 – February 2023**

- Completed Core Java, JavaScript, and XML training with hands-on Selenium automation, applying test design and execution to identify and help resolve 5 critical defects while strengthening QA workflows.

PROJECTS

Applied AI Engineer | Financial Document Intelligence & RAG System

- Built a document intelligence and question-answering system for tax records, pay stubs, and lease agreements using a Retrieval-Augmented Generation (RAG) approach.
- Implemented PDF ingestion with OCR and structured parsing, applied section-based and semantic chunking, and used hybrid retrieval to feed grounded context into an LLM with citation-aware outputs.
- Enabled reliable, source-backed answers for numeric and clause-sensitive questions while reducing unsupported responses.

Full-Stack Developer | GeoSyncra Navigation Platform

- Developed a navigation platform with a Spring Boot backend and PostgreSQL to support routing workflows and location-based queries.
- Built REST APIs for routing, designed a geo-indexed PostgreSQL schema, containerized services with Docker, and deployed via Railway with iterative backend improvements.
- Increased routes served per day by 25%, improved data retrieval speed by 35%, and reduced average query latency by 25%.

ML Engineer | Multiple Disease Prediction System

- Created an ML prediction system to classify disease risk from symptom inputs using multiple supervised learning models.
- Trained and tuned Decision Tree, Random Forest, MLP, and KNN models, using Dask and GridSearchCV for parallel hyperparameter optimization and building a production-style inference module.
- Improved model performance by 30% and achieved 85% positive feedback during beta evaluation based on clinician input.