NIRVISHA SONI

352-682-9917 | nsoni@ufl.edu | linkedin.com/in/nirvishasoni | github.com/Nirvisha82 | nirvishasoni.dev | Gainesville, FL

EXPERIENCE

AI Software Developer | UF IC3, Gainesville, FL (Part-time)

August 2025 - Present

- Architecting agentic RAG pipeline, processing 20K+ clinical documents with cross-modal reasoning across text, images, and tabular data within document pages
- Built intelligent retrieval architecture combining vector search with external knowledge integration, achieving 30% improvement in clinical query accuracy.
- Implemented PHI redaction, hallucination detection, HIPAA guardrails, ensuring compliance with healthcare privacy standards.
- Wrote unit/integration tests to validate retrieval accuracy and reduce query latency by 20%.

Software Engineer Apprentice | American Express, FL

August 2025 - Present

- Built a GitHub App in Go that auto-creates branches for labeled issues, generates PR templates, and pre-populates intelligent file-change suggestions, reducing developer setup effort by 40% per sprint.
- Designed a repo-aware LLM workflow, integrating static analysis and embeddings retrieval to identify likely impacted files and propose line-level code edits.
- Implemented an end-to-end issue→branch→PR automation pipeline, cutting cycle time from issue report to first draft PR by 25% and improving consistency across distributed teams.

Graduate Analyst | Barclays, Pune, India

July 2023 - July 2024

- Built backend microservices using Java + Spring Boot for an enterprise trading platform, processing \$2B+ daily transaction volume with 99.9% uptime.
- Designed REST APIs integrating real-time market feeds with execution systems, achieving sub-millisecond latency and reducing order errors by 15%.
- Implemented Azure Event Hubs + Kafka pipelines for financial reporting, cutting report generation time by 20% and enabling faster trader insights.
- Automated post-trade validation using AWS Lambda and Step Functions, reducing manual intervention by 60% and accelerating settlement workflows.
- Optimized SQL scripts to cleanse high-volume trade data, ensuring regulatory compliance and improving downstream reporting reliability.

Machine Learning Intern | AlgoAnalytics Private Limited, Pune, India

January 2023 - April 2023

- Conducted topic modeling on 5K+ financial news articles, enabling a feature for topic-based search in production.
- Built transformer-based summarization models, improving clarity of news reports by 10% in user testing.

PROJECTS

Roamio: The Ultimate Travel Companion (GitHub)

January 2025 - April 2025

- Designed a full-stack platform enabling users to browse, manage, and share personalized travel itineraries using React.js and Go.
- Implemented REST APIs for real-time destination data and interactive map-based recommendations; optimized for sub-second response times.
- Built a responsive UI with Tailwind CSS & modular React components to deliver a seamless cross-device user experience.

Re:Gen: AI-Powered Gmail Reply Assistant (GitHub)

February 2025 – May 2025

- Built a real-time system that listens for incoming emails and auto-generates personalized draft replies using Gmail API and LLM-powered prompt engineering.
- Implemented a secure, multi-user backend using NestJS and SQLite, with OAuth2-based authentication and token management.
- Leveraged Google Cloud Pub/Sub for instant push notifications, achieving < 1s latency in auto-drafted replies.

TECHNICAL SKILLS

Languages: Python, Go, C++, Java, JavaScript, TypeScript, SQL

Frameworks & Libraries: Node.js, NestJS, React.js, Flask, Spring Boot, LangChain, LlamaIndex, PyTorch, TensorFlow

Databases: MySQL, PostgreSQL, MongoDB, SQLite, Redis

Cloud & DevOps: AWS, Azure, GCP, Docker, Kubernetes, Jenkins, CI/CD Pipelines

Tools & Practices: Git, REST/GraphOL APIs, Microservices, Unit Testing, Agile/Scrum, Software Architecture, Figma

EDUCATION

Master of Science - Computer Science, University of Florida, Gainesville, FL
Coursework: Advanced Data Structures, Distributed Systems, Analysis of Algorithms, Machine Learning, NLP, Bioinformatics

Bachelor of Technology - Information Technology, VIT, Pune, India
CGPA 9.62/10 | August 2019 – May 2023

Coursework: DSA (C++/Java), OOP, DBMS, Operating Systems, Computer Networks, Data Science, Artificial Intelligence