

# Varun Jhaveri

732-558-5686 | [varun.jhaveri.02@gmail.com](mailto:varun.jhaveri.02@gmail.com) | [linkedin.com/in/varunjhaveri](https://www.linkedin.com/in/varunjhaveri) | [github.com/varun20020124](https://github.com/varun20020124)

## EDUCATION

### University of Massachusetts Amherst

May 2025

*Bachelor of Science Computer Science and Mathematics*

*GPA 3.74/4.00*

**Coursework:** Computer Networks, Databases, Data Structures and Algorithms, Operating Systems, Software Design Principles, Web Programming, Machine Learning, Information Retrieval, Natural Language Processing

## WORK EXPERIENCE

### NASA

Greenbelt, MD

#### *Software Engineer Intern*

*Jun 2024 – Aug 2024*

- Engineered production Python microservices packaged with **Docker** to process satellite data, improving wind-velocity model deployment reliability and reproducibility.
- Orchestrated CI/CD pipeline using GitHub Actions to automate training, testing, and deployment, increasing release frequency by 40%.
- Automated hyperparameter tuning with **Optuna** integrated into CI workflows, reducing model optimization time by 40% and boosting throughput.
- Refactored data processing modules into Linux-based containers, adhering to SOLID design and integrating unit-tested code via peer-reviewed pull requests.

### Dream11

Mumbai, India

#### *Software Engineer Intern*

*Jun 2023 – Aug 2023*

- Developed high-throughput real-time fantasy score microservice using **FastAPI** in Python, delivering sub-second latency during peak match events.
- Rebuilt ingestion pipelines using **Apache Airflow** and Redis caching, cutting data latency for live match updates and increasing reliability.
- Implemented CI/CD deployment on Kubernetes clusters with zero-downtime rollouts and instant rollback capabilities using containerized pipelines.
- Facilitated Agile sprint demos with product and data science leads via **JIRA**, ensuring alignment across teams and rapid feature iteration.

## PROJECTS

### NoteShare - Live One-Way Notepad with Agentic LLM Assist

- Constructed collaborative Python microservice stack backed by WebSockets to stream interviewer-only live notes with sub-second update latency.
- Embedded a LangChain agentic workflow using GPT-4o for on-demand code explanations during interview sessions, improving developer feedback quality.
- Deployed end-to-end with CI/CD pipelines on Linux VMs using container orchestration, ensuring scalable and secure real-time interviewing platform.

### CollabQuest - LLM-Augmented Document Editor with Semantic Q and A (RAG)

- Built Python backend using **RAG** with FAISS-based semantic search to support context-aware Q and A on uploaded documents.
- Exposed REST APIs via FastAPI, indexing documents on save and returning contextually relevant responses while securing endpoints.
- Implemented containerized deployment using CI/CD on Kubernetes clusters, ensuring high availability and smooth feature rollback when necessary.

## TECHNICAL SKILLS

**Languages:** Python, Java, JavaScript (ES6+), SQL

**Frameworks:** FastAPI, LangChain, OpenAI API

**Databases:** PostgreSQL, Redis, FAISS

**Tools:** Docker, Kubernetes, Ansible, Git, Linux