

# Sathvik Vadavatha

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## EDUCATION

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### Northeastern University

Master of Science (MS) in Computer Information Systems

Boston, MA  
January 2024 - December 2025

### University of Illinois Urbana-Champaign

Bachelor of Science (BS) in Mechanical Engineering

Champaign, IL  
August 2018 - May 2022

## SKILLS

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**Programming:** Python, Java, R, SQL

**Machine Learning & AI:** TensorFlow, PyTorch, Keras, Scikit-Learn, LangChain, LangGraph, HuggingFace, CUDA, MLflow

**Data Analysis & Visualization:** Pandas, NumPy, Excel, SciPy, Statistics, Matplotlib, Seaborn, Tableau, Power BI

**Cloud & DevOps:** AWS (SageMaker, Step Functions, S3), GCP, Azure, Airflow, Docker, Terraform, Git

**Databases & Big Data:** PostgreSQL, Snowflake, MongoDB, Hadoop, Databricks, Redis, Pinecone, FAISS

**Other:** FastAPI, Next.js, Streamlit, React, Vue.js, HTML, CSS, PTC Windchill, Jira

## WORK EXPERIENCE

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### Triple Ring Technologies

Data Science Intern

Boston, MA  
June 2025 - August 2025

- Architected IaC ML pipelines with Terraform & AWS Step Functions (multi-cloud on AWS/GCP), enabling scalable training, deployment, and inference on medical datasets
- Automated data pipelines for time-series & imaging (preprocessing, windowing, feature engineering), improving reproducibility and reducing manual preparation
- Deployed Random Forest models for activity classification & regression, plus imaging workflows, on SageMaker real time endpoints for production grade inference
- Authored reusable IaC templates & documentation aligned with FDA AI/ML guidelines, boosting compliance readiness and multi-cloud extensibility

### ITC Infotech USA

Engineering Data Management Intern

Frederick, MD  
September 2022 - October 2023

- Developed functional test suites for PTC Windchill modules in an Agile environment, identifying workflow defects and validating cross system integration for engineering data
- Administered structured storage of 3D CAD and documentation assets, implementing version control, revision governance, and standardized metadata practices
- Customized Windchill configurations including attributes, lifecycles, naming conventions, and access rules to streamline data management operations and reduce manual errors
- Collaborated with cross functional teams to troubleshoot issues and support iterative improvements during release cycles

## PROJECTS

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### NutriGuard AI (Food Label Analyzer & Meal Tracker) | [GitHub](#)

March 2025 - April 2025

- Engineered a full-stack AI-powered nutrition assistant that integrates OCR-based label extraction, meal journaling, ingredient analysis, and contextual Q&A
- Implemented automated pipelines to extract, clean, and ingest food label data (Azure OCR) and public datasets (USDA, FDA, NIH), storing embeddings in Pinecone for RAG style vector search
- Created a secure app (Next.js + FastAPI) with JWT-authentication logging and Dockerized deployment on AWS EC2

### Realtime Copilot (Live Screen AI Assistant) | [GitHub](#)

August 2025 - October 2025

- Built a real time copilot that joins a LiveKit room, captures live screen streams, performs OCR and vision analysis, and provides contextual natural language guidance
- Implemented a distributed architecture with a Next.js client, Express API, and a Node worker that handles OCR, STT, TTS, frame analysis, and GPT 4o reasoning
- Deployed containerized services on AWS EC2 using Terraform for low latency operation, supporting live screen reasoning, audio transcription, and session memory