

# Bhanu Sunku

+17473088687

bhanukedhar09@gmail.com

linkedin.com/in/bhanukedhar

Illinois, USA

github.com/BhanuKedhar09

## SUMMARY

AI/ML Engineer focused on generative AI systems and multi-agent pipelines, Shipped a production classifier at Elevance Health that cut manual review by **60%**. Built a **multi-agent** pipeline that extracts and reconstructs scientific flowcharts from research papers, achieving **90%** accuracy via LLM-as-a-Judge.

## WORK EXPERIENCE

### Graduate Researcher

Jan 2025 - Dec 2025

#### DATA Analytics Theory & Applications Lab, NIU

Dekalb, IL

- Reconstructed scientific flowcharts with **90%** accuracy across **1.4M** figures, using a Chain-of-Events, **RAG** and **multi-agent** pipeline (Phi-4, Qwen2.5-VL, InternVL, Llama4-Scout-as-judge).
- Authored **FluidViews**, a framework treating visual elements as first-class manipulable objects via **two** novel interaction primitives; user study showed it eliminated cross-view navigation overhead vs. baseline dashboards.
- Deployed and maintained multi-node **Ray + vLLM** inference infrastructure on HPC, serving foundation models sharded across 16 A100 GPUs with self-serve for custom models.

### Data Analytics

May 2024 - Dec 2024

#### Elevance Health

Atlanta, GA

- Shipped a classification system (Scikit-Learn, REST API) auditing **144K+ reports** at **95%** test accuracy, cutting manual review by **60%** and eliminating SLA penalty exposure from performance-guarantee clients.
- Lifted minority-class recall by **20%** via failure-mode feature engineering, k-fold CV, and hyperparameter tuning.
- Built D3.js dashboards exposing pipeline-stage progress; adopted as the default daily artifact for the ops team.

### DevOps Engineer Intern

Mar 2021 - Aug 2021

#### Alation

Chennai, India

- Reduced instance costs by **30%** migrating from MacStadium Anka to **AWS Mac VMs**; built Jenkins **CI/CD** pipelines with auto-scaling and load-balancing for Docker-based environments.

## SKILLS

### Programming Languages

Python | SQL | JavaScript | Bash

### Frameworks & Libraries

PyTorch | Scikit-Learn | HF Transformers | LangChain | LangGraph | Pandas | XGBoost | D3.js | N8N | FastAPI

### Cloud & DevOps

AWS | GCP | Git | Docker | Kubernetes | CI/CD

### MLOps & Systems

vLLM | Ray | Triton | RAG | PEFT/LoRA | Fine-Tuning | Distributed inference | Multi-Agent Orchestration | FAISS | MLflow | Pinecone | ChromaDB | Prompt Engineering | Tray.io | OpenCV | DeepEval

## EDUCATION

### PhD Computer Science

Jan 2025 - Present

#### Northern Illinois University

GPA 3.8 / 4.0

### M.S. Computer Science

Aug 2022 - May 2024

#### Northern Illinois University

GPA 3.68 / 4.0

### B.S. Computer Science

Jun 2017 - Jun 2021

#### Amrita Vishwa Vidyapeetham