

Kashyap Tanuku

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EDUCATION

Rutgers University

Bachelor of Science in Computer Science & Mathematics

New Brunswick, NJ

Sep 2022 – Dec 2025

Relevant Coursework

Machine Learning Principles, Artificial Intelligence, Data Science, Data Management, Data Structures and Algorithms, Design Analysis of Computer Algorithms, Combinatorics, Graph Theory, Linear Algebra, Computer Architecture.

EXPERIENCE

Coforge | Data Science Intern

June 2025 – August 2025

Python, LangChain, PyTorch, AWS

- **Automated root cause analysis** for large scale applications by designing a scalable ETL pipeline and processing multi-source telemetry event data.
- Enabled **diagnosis of service failures** by identifying root cause with a **95%+** accuracy by building an RCA engine integrating Causal Bayesian Networks and Graph Neural Networks using **PyTorch**
- Aided Site Reliability Engineers by **fine-tuning** a LLaMA 3.3 model on internal docs and integrating a **Retrieval-Augmented Generation** framework for remediation generation using **PyTorch** and **LangChain**.
- Orchestrated the entire RCA pipeline as a failure-triggered **AI agent**, streamlining system reliability and self-healing operations, reducing the incident management process by **66%**

blaZop | Software Engineer Intern

June 2024 – September 2024

Angular, ChromaDB, Docker, Flask, Python, Ollama

- Improved user-service interaction for **10+** large enterprise clients, enabling intelligent support conversations by building a full-stack AI assistant chatbot using **Angular**.
- Generated a high-quality training dataset of **2,900+** instances from internal docs, reducing manual data collection by **99%** by engineering custom **AI agents** using **Python** and **Ollama**.
- **Fine-tuned** a LLaMA 3.1 model and implemented a **Retrieval-Augmented Generation** workflow, enabling the chatbot to deliver accurate, context-aware responses aligned with enterprise knowledge bases.
- Optimized client service discovery across **1,000+** architecture templates, achieving **sub 1s search times**, by building a vector search engine using **Angular**, **Python**, and **ChromaDB**.

First Move Partners | Software Engineer Intern

May 2023 – August 2023

React, Express.js, MongoDB, Postman

- Built a full-stack admin dashboard using **React**, enabling real-time management and monitoring of hospital staff and resource utilization by prototyping features using **agile methodology**.
- Streamlined data operations for hospital management by designing **RESTful APIs** to retrieve and update **MongoDB** records using **Express.js**, **Axios**, and **Postman**.

PROJECTS

SVD Movie Recommender System | *Python, NumPy, Pandas, Matplotlib*

- Built a movie recommender system using **Singular Value Decomposition (SVD)**, achieving **92% precision** and **96% NDCG** by learning latent user preferences from a cleaned dataset of **100,000+** movie ratings.
- Predicted user ratings for unseen movies with **0.87 RMSE** and **0.67 MAE** by engineering a matrix factorization pipeline in **Python** (NumPy & Pandas) and visualizing performance trends with **Matplotlib**.

Fast Trajectory Replanning | *Python, Matplotlib, NumPy*

- Engineered a trajectory replanning system by implementing five **A* search** algorithm variants, enabling optimal path calculation in 101×101 obstacle-laden grids in **Python** using **NumPy**.
- Reduced node exploration and improved runtime by **20%** by engineering a custom binary heap and designing domain-specific heuristics for faster convergence.
- Built an interactive **Matplotlib** path visualizer to compare algorithm efficiency, enhancing interpretability.

TECHNICAL SKILLS

Languages: Python (spaCy, NumPy), JavaScript (GSAP), TypeScript, C, C++, HTML, CSS, SQL, Java

Frameworks: PyTorch, LangChain, React, Angular, Flask, Next.js, Node.js, Express.js, Tailwind CSS, Bootstrap

Developer Tools: Docker, ChromaDB, MongoDB, AWS, Firebase, Bitbucket, Git