Kashyap Tanuku

kashyap.tanuku@rutgers.edu | linkedin.com/in/kashyaptanuku | kashyaptan.com | 732-318-7425

EDUCATION

Rutgers University-NB   New Brunswick, NJ
Bachelor of Science in Computer Science & Mathematics   *Sep 2022 – Dec 2025*

EXPERIENCE

blaZop | Software Engineer Intern   June 2024 – September 2024
Angular, ChromaDB, Docker, Flask, Python, Node.js
- Created a full-stack assistant chatbot that streamlines user-service interaction for **10+** large enterprise clients utilizing **Angular**.
- Engineered custom **AI agents** to generate a training dataset of **2900+** instances based on blaZop's user guide.
- **Fine-tuned** a Llama 3 model using the generated dataset and implemented a custom **Retrieval-Augmented Generation workflow** for context-aware responses to serve as chatbot backend.
- Developed a vector search engine with **ChromaDB** and **OpenCLIP image embedding**, enabling **sub 1 second** search times across 1000+ blaZop architecture templates to optimize client product/service selection.

First Move Partners | Software Engineer Intern   May 2023 – August 2023
React, Express.js, Node.js, MongoDB
- Created a full-stack prototype of a login page and an admin dashboard for client presentation using the **MERN stack**, following **Agile methodology**, to manage and monitor hospital staff and hospital resource utilization.
- Engaged in biweekly client meetings, to update prototype to align with client specifications and gaining experience with client interaction.

PROJECTS

SVD Movie Recommender System | *Python, NumPy, Pandas, Matplotlib*
- Developed a **Singular Value Decomposition** recommender algorithm that gives movie recommendations to a user based on watch history with a **0.92 precision** and a **0.96 NDCG**.
- Created a movie rating prediction system that predicts ratings for unwatched movies of a user based on watch history with a **0.87 RMSE** and a **0.67 MAE**.
- Curated and cleaned a data set with **100,000+** user ratings

A* Path Finding | *Python, Matplotlib, NumPy*
- Implemented 5 different variations of A* search algorithm from scratch, achieving optimal path calculation in 101x101 grids with obstacles.
- Developed an interactive visualization interface to compare the efficiency and path taken by the algorithm from a starting point to an ending point using **Matplotlib**.
- Optimized the algorithm by implementing a custom binary heap and creating custom heuristics that lowered node exploration and improved run time by **20%**

YouTube Music Clone | *AWS, React, Express.js, Python, RapidAPI*
- Led a team of 3 to develop a full-stack YouTube Music clone using **React**, enabling users to search, play, download, and upload music.
- Created a secure login, sign-up, and user profile system using **JWT tokenization**, allowing users to save playlists and songs.

RELEVANT COURSEWORK

Artificial Intelligence, Data Science, Data Structures & Algorithms, Combinatorics, Graph Theory, Cryptography, and Computer Architecture.

TECHNICAL SKILLS

Languages: Python (spaCy, NumPy), Java, JavaScript (GSAP), TypeScript, C/C++, HTML/CSS, Assembly
Frameworks: React, Angular, Flask, Flutter, Next.js, Node.js, Express.js, Selenium, Tailwind CSS, Bootstrap
Developer Tools: Docker, ChromaDB, MongoDB, AWS, Firebase, Azure, Bitbucket, Git