

Kritan Baniya

kritanb3@gmail.com | (917)-825-2650 | github.com/kritanbaniya | kritan.net

EDUCATION

The City College of New York
Bachelor of Science in Computer Science

Manhattan, New York
Dec 2026

GPA: 3.6

Relevant Coursework: Data Structures, Algorithms, Database, Software Design

Skills

Languages: JavaScript, TypeScript, Python, Java, C++, SQL

Technologies: React, Node.js, Express.js, FastAPI, MongoDB, AWS S3

PROJECTS

Voice-Enabled Restaurant Assistant — Dec 2025

- Collaborated in a team to develop a voice-enabled chatbot for interactive restaurant exploration through natural conversation.
- Implemented a **retrieval-augmented generation (RAG)** pipeline using a **vectorized knowledge base** to provide context-aware responses via an Ollama cloud model.
- Designed multi-turn conversational memory persisted in browser local storage to support context-aware interactions.
- Integrated the **Web Speech API** for speech-to-text input and the **ElevenLabs API** for text-to-speech, enabling a fully hands-free user experience.

Group Photo Sharing App — Aug 2025

- Built a real-time group photo-sharing web application where users can join lobbies, upload images, and download images shared by other members.
- Integrated **AWS S3** for scalable image storage and **MongoDB** with **Mongoose** for metadata management.
- Developed backend services with **Express.js** and implemented real-time updates using **Socket.IO**

Devanagari Letter Recognition — Mar 2025

- Developed an application that recognizes user-drawn Devanagari letters using a **CNN** model trained on the Devanagari dataset.
- Built the backend using **FastAPI** and TensorFlow for real-time inference, served model via a **REST API**
- Designed a browser-based frontend with JavaScript, HTML, and CSS for drawing letters and displaying predictions interactively.

EXPERIENCE

Tech Intern — NYC Dept of Education, NY

Jul 2024 – Aug 2024

- Provided technical support to enrollment staff by troubleshooting hardware and software issues, demonstrating effective debugging techniques to minimize downtime.
- Configured computers and integrated devices with network switches for reliable Ethernet access, ensuring smooth connectivity and adherence to system standards.
- Installed necessary software packages to support enrollment processes, thereby enhancing operational efficiency and application reliability.

Assistant/Computer Support — HK Printing, NY

Jul 2022 – Aug 2025

- Provided technical support and resolved computer/software issues to maintain efficient daily operations.
- Managed data for tracking inventory, orders, and client information.
- Designed and produced custom print materials based on client specifications.
- Communicated with clients to handle requests, process orders, and ensure satisfaction with final products.