BI RONG LIU

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EDUCATION

B.S., Computer Science, Brooklyn College, CUNY   Expected: May 2026
- **Relevant Coursework:** Data Structures, Algorithms, Database Systems, Artificial Intelligence

Technical Skills

Languages: Typescript/JavaScript, Python, SQL, Java
Technologies: ExpressJS, ReactJS, MongoDB, MySQL, Tailwind CSS, PostgreSQL, LangChain, LangGraph, Flask, OpenAI API, Docker, Git, Amazon Web Services (AWS), Large Language Model (LLM)

EXPERIENCE

MTA   New York, NY
Data Analyst Intern   October 2025 - Present
- Built a **streamlit** document processing pipeline to clean, normalize, and embedded **100+ internal documents** into **Qdrant** vector database, enabling multiple internal teams to easily query data and **reduced ingestion time by 40%**

Anote   New York, NY
Software Engineer Intern   May 2025 - September 2025
- Engineered an AI agent using **Python, Flask, LangGraph** and **LLM** model to streamline complex data workflows by 30%
- Deployed 4 applications using **Amazon Web Services** and **Docker** to ensure high availability and reduced downtime by 40%
- Developed and optimized frontend interfaces with **JavaScript** and **ReactJS** while collaborating in weekly Agile standups to ensure timely delivery and seamless integration with backend systems

Brooklyn College Computer Science Club   New York, NY
Software Developer   October 2024 – May 2025
- Led a team of 6+ developers to launch the club's chatbot, enhancing interaction for more than 1,000+ computer science students
- Engineered a RAG chatbot with **Python**, **Flask** and **LangChain,** improved inquiry speed by **50%** and reduced search efforts
- Optimized the club website using **TypeScript**, **ReactJS** and **TailwindCSS**, improving Lighthouse performance score by 30% and enhancing accessibility, which drove over 2,000 unique visitors and significantly improved user experience

PROJECTS

Spendly | Source Code | **(First Place at Brooklyn College Hackathon)**
- Led development of progressive web app using **ReactJS** to help users track spending and build smarter financial habits by scanning receipts, categorizing expenses, and visualizing budgets, **reducing manual entry by 70%** and **improving tracking accuracy by 80%.**
- Leveraged **OpenAI Vision** (Computer Vision) to **extract 10+ receipts data** and engineered **Large Language Model** systems prompts to ensure accurate visualization of categorized spending, saving enhancing user clarity and **reducing input time by 80%**
- Secured first place in Finance Track, outperformed 30+ participants across 20+ projects at Brooklyn College Bulldog Hackathon

NutriVoice | Devpost | **(First Place at Columbia University Hackathon)**
- Led the development of a voice guided dietary app using **ReactJS** to help visually impaired make informed nutritional decisions
- Engineered and fine-tuned open source **Large Language Model** system prompts, **achieved 90% accuracy in food recognition**
- Leveraged **OpenAI Whisper** (Speech to Text) for real-time speech input and **Computer Vision** to **analyze 20+ food images** extracting nutrition facts, detecting allergens, and expired dates to improve accessibility for visually impaired users

Signlingo | Source Code | **(First Place at Rutgers University Hackathon)**
- Built a web app to help users learn American Sign Language using real-time gesture recognition powered by a custom convolutional neural network model **trained on 87,000+ Alphabets images**, **achieved 95% accuracy and reducing error correction by 40%**
- Leveraged **ReactJS, TailwindCSS, Python, Flask, PostgreSQL, and Cloudflare Workers** to build a scalable ASL learning web app, cutting load time by 40% and enabling real-time gesture recognition with fast, reliable frontend-backend integration
- Secured first place in AI Application Built with Cloudflare Track, outperformed 500+ participants across 100+ projects at HackRU