

BI RONG LIU

birongliu.dev | birong.liu75@gmail.com | github.com/birongliu | linkedin.com/in/birongliu

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

Technologies: NextJS, ExpressJS, ReactJS, MongoDB, MySQL, Tailwind CSS, PostgreSQL, LangChain, Flask, OpenAI API

Developer Tools: Microsoft Azure (App Service, Virtual Machines), Git, Amazon Web Services (S3 Bucket), Microsoft Office Suite

Certifications: [Postman API Fundamentals Student Expert](#)

EXPERIENCE

Brooklyn College Computer Science Club

New York, NY

Full-Stack Developer | Python, Flask, LangChain, NextJS/ReactJS, TailwindCSS

October 2024 – Present

- Led a team of 10+ developers to launch the club's chatbot, enhancing interaction for more than **1,000+** computer science students
- Improved inquiry speed by **50%** and reduced search efforts by engineering a RAG chatbot with **Python, Flask** and **LangChain**
- Drove over 2,000 unique visitors by optimizing the club website, ensuring seamless performance and accessibility for users

Headstarter

New York, NY

Software Engineer Fellow | ReactJS, ExpressJS, JavaScript

June 2024 – September 2024

- Led a team of 3 fellows to develop a dental clinic dashboard using ReactJS, improved scheduling and data access features, which boosted patient management systems efficiency by 35% and enhanced the workflow experience for clinic staff and administrators
- Engineered **10+ RESTful API endpoints** using ExpressJS to streamline patient data access across the dental clinic dashboard, **improving retrieval speed by 25%** and enabling quicker access to appointments, treatment history, and medical records
- Engaged in Agile processes with 3 fellows under supervision of mentor, ensuring 100% of deliverables were completed on time

PROJECTS

Spendly - [Source Code](#) | (First Place at Brooklyn College Hackathon)

February 2025 – February 2025

- Led 2 developers to develop a progressive web app to help users track spending and build a smarter financial habits by scanning receipts, categorizing expenses, and visualizing budgets, reduced manual entry by 70% and improved tracking accuracy by 80%
- Leveraged **OpenAI Vision** (Computer Vision) to **extract 10+ receipts data** and engineered Large Language Model system 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)

February 2025 – February 2025

- Led 3 developers to develop a voice guided dietary app that help visually impaired to 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 **Vision** (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)

October 2024 – October 2024

- 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 **ReactJ**, **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

VOLUNTEER

CUNY Generative AI Workshop

New York, NY

Ambassador

March 2025 - Present

- **Mentored over 90+ students** from 15 CUNY colleges during generative AI hackathon, offering hands-on support and project guidance, which led to an 80% increase in student proficiency, engagement, and confidence in building AI-powered applications
- Provided feedback on session content across 5 workshops, contributing to curriculum improvements based on participant needs
- **Managed a Discord server with over 100+ participants** for Generative AI workshop, offering real-time technical support, and streamlining communication between participants and staff from Ernst & Young and the New York CEO Job Council