

YIZE LIU

Brooklyn, NY | (215)-980-9693 | yizeliu.com | yl7401@nyu.edu

Education

New York University, Tandon School of Engineering, NYC
Master of Science, Major in Computer Science

Sept 2024 - Dec 2025

New York University, Tandon School of Engineering, NYC
Bachelor of Science, Major in Computer Science, Minor in Economics and Mathematics

Sept 2020 – May 2024

Work Experience

Software Technology Specialist, On-Time Payroll, Remote

Feb 2026 – Current

- Developing custom software solutions to streamline payroll management and automate internal operations
- Integrating agentic LLMs to enhance customer support workflows and automate repetitive internal tasks
- Designing and building customer-facing full-stack websites with Next.JS

Full Stack Software Engineer (On Campus), New York University, NYC

Jan 2025 – Dec 2025

- Designed and built a comprehensive web platform for NYU's department of lab operations
- Developed a responsive front-end utilizing Next.js and Tailwind CSS to deliver interactive lab visualizations
- Architected a scalable backend utilizing Python, Django, and PostgreSQL to manage a complex relational dataset, tracking 20,000+ tagged inventory assets across hundreds of facility rooms

Software Engineer Intern, Amazon Web Service, NYC

Summer 2023 & Summer 2024

- Architected and deployed a machine-learning-based productivity solution to surface actionable insights for billing workflows
- Designed and implemented a full-stack internal development tool that automates record keeping for test builds
- Utilized a variety of AWS services such as API Gateway, AuroraDB, Lambda, SageMaker, CDK, CloudFormation, CloudFront, S3 and EC2 to enable an automated continuous deployment pipeline
- Collaborated within an Agile team, utilizing CI/CD pipelines, automated testing, and code review processes

Projects

AI-Based Support Agent

- Engineered an LLM-based support ticket management chatbot with agentic capabilities using LangChain and Gemini API

Real-Time IoT Malware Detection Pipeline

- Collaborated with other students to build a ML model that detects malware in IoT network traffic using Kafka and Spark

CoFun Social Platform

- Designed and implemented a full-stack social networking platform to facilitate student connectivity utilizing Python, PostgreSQL, HTML, and CSS
- Authored technical design documents and engineered the database schema, back-end infrastructure, and key front-end components

Mock Airline Ticketing System

- Developed a full-stack airline reservation and management web app using Python, Flask and MySQL enabling customer booking workflows, staff operations, flight management, and reporting features.

ESP8266 E-Ink Subway Time Tracker

- Reverse engineered a ESP8266-based e-paper display and programmed it to fetch live NYC subway data, render arrival info and service status, and runs reliably for months using knowledge in networking, JSON parsing, and hardware integration.

Skills

- Common Programming Languages (C++, Python, Java)
- Full Stack Web Development (JavaScript/TypeScript, Next.JS, React)
- Large Language Models(LLMs), RAG Engineering, Machine Learning and Agentic Tools
- Cloud Computing (AWS)
- Computer Graphics (Unity, OpenGL)