

Annie (Jiaying) Xu

917-519-1953 | jx2603@columbia.edu | [linkedin.com/in/xxanxnjie](https://www.linkedin.com/in/xxanxnjie)

EDUCATION

Columbia University – New York, NY

Aug. 2024 – Dec. 2025

M.S. in Computer Science

GPA: 3.83

- Coursework: Cloud Computing, Advanced Software Engineering, Advanced Algorithms, NLP

Rensselaer Polytechnic Institute (RPI) – Troy, NY

Aug. 2020 – Dec. 2023

B.S. in Computer Systems Engineering and Computer Science, Minor in Economics

GPA: 3.75

- Coursework: Data Structures, Operating Systems, Network Programming, Computer Architecture

TECHNICAL SKILLS

Languages: C/C++, Python, JavaScript, HTML/CSS, SQL

Tools/Frameworks: Git, Docker, Flask, React.js, Express.js, Tailwind CSS, MongoDB, RESTful API, AWS

EXPERIENCE

Software Engineering Intern

Aug. 31, 2023 – Dec 21, 2023

MVP Health Care

Troy, NY

- Created an interactive Choropleth map to visualize pharmacy deserts in New York State, enhancing healthcare accessibility insights.
- Developed a Digital Twin for pharmacy accessibility by simulating and analyzing real-world healthcare data to anticipate trends and improve decision-making.
- Applied Random Forest and Logistic Regression models to improve medical adherence prediction by 15%.

Systems Analysis and Exploitation Intern

May 31, 2023 – Aug. 18, 2023

Assured Information Security

Rome, NY

- Conducted efficiency assessments of VMware cloud hypervisor forensics platform with a 20% improvement in processing time.
- Built radio string injection attack script for open-source RF and reverse engineering framework using C++.
- Developed comprehensive test scripts to evaluate framework's functionality and streamline CI/CD capabilities.

Application Engineering Intern

May 23, 2022 – Aug. 22, 2022

Xallent Inc.

Albany, NY

- Engineered tools for extracting specific electrical and mechanical properties (e.g., resistance, capacitance, stress-strain), improving data accuracy by 40% in sensor analysis and validation workflows.
- Fine-tuned control systems to optimize probe-device interactions enhancing system performance by 30%.
- Created a data acquisition system for continuous collection, processing, and visualization of measured data in Python.

PROJECTS

String Swift – Stringing Request App | Project Developer | JavaScript & Python

- Built a responsive front-end with React and Tailwind CSS, featuring user login, order creation, reviews, and real-time updates.
- Integrated front-end with RESTful APIs and deployed the application on AWS S3 to optimize performance and user accessibility.

CozyQuarter – Dorm Review Hub | Project Leader | JavaScript

- Led a team to develop a web platform for students to post and browse dorm reviews, supported by a Node.js/MongoDB backend for managing reviews, ratings, and photos.
- Designed and integrated a map feature to enable seamless dorm location visualization and feedback exploration.

GitGud – Social Welfare API | Project Developer | C++

- Built and managed a social welfare API using Node.js, MongoDB, and JWT for secure authentication and efficient resource management.
- Developed a client-side application with a dynamic map for real-time updates and streamlined data handling across social service.