

Irene Liu

liuirene256@gmail.com | <https://liuirene256.github.io/> | [linkedin.com/in/liuirene256](https://www.linkedin.com/in/liuirene256)

EDUCATION

Carnegie Mellon University | Pittsburgh, PA

May 2026

Bachelor of Science in Computer Science | *Minor in Computational Finance*

GPA: 3.9/4.0 (Dean's List High Honors, all semesters)

Relevant Courses: Algorithms, Data Structures, Functional Programming, Theoretical CS, Concepts in AI, Math Foundations for CS (TA), Linear Algebra (Honors, TA), Probability for Computing, Math Finance

Illinois Mathematics and Science Academy | Aurora, IL

SKILLS

Proficient Languages: Python, Java, C/C++, C#, SML, HTML/CSS, JavaScript, jQuery, SQL, YAML, JSON

Tools: Git, Docker, Kubernetes, CMake, GDB, Vim, LaTeX, Shell, MongoDB, TensorFlow, MS Office

Other: Test Automation, Machine Learning, Data Analysis, Deep Learning, Databases, Mathematics

WORK EXPERIENCE

Magnetar Capital | Evanston, IL

June – July 2024

Software Engineering Intern

- Achieved infrastructure stability by enhancing in-house Kubernetes deployment framework with an automated monitoring system to verify the delivery of outsourced holdings and market data files

Panduit Corporation | Tinley Park, IL

May – June 2024

Firmware Engineering Intern

- Upgraded communication between PDUs and their management information database by writing efficient and effective C algorithms for the relevant database objects; product now used by leading tech companies.
- Pioneered novel features to accommodate multiple administrative users by leveraging C's unique memory management to support parallel database retrievals and modifications

Northwestern Feinberg School of Medicine | Chicago, IL

2021 – 2023

Biotech Research Intern

- Spearheaded and presented 2 AI-backed research projects as first author; to be published in 2025
- Enhanced project efficiency by automating the data extraction of >1,000 X-ray fluorescence microscopy scans using image processing and quantitative analysis techniques

PROJECTS

Delivery Monitoring Interface · C# · YAML

Full Stack – 2024

- Developed an automated program to dynamically profile directories and notify stakeholders of missing files

Venture Capital Matchmaking Platform · JavaScript

Front End – 2023

- Connected VCs and startups with AI-curated pairings. Best MongoDB Hack (of 300+ nationwide).

Nasal Disease Diagnostic System · Python

AI – 2022

- Increased diagnosis accessibility and decreased cost by programming and training an SVM machine learning and signal processing algorithm with comparable accuracy to PROM-based clinician diagnosis

AWARDS

AIME Qualifier, Hedging Contest t10, American CS League 1st Place, National Merit Scholar, National Debater