# Emily Ho

eeh2003@sbcglobal.net | (847) 563-0137
LinkedIn: www.linkedin.com/in/emily-e-ho

## Education

**University of Illinois Urbana Champaign**

*Masters of Computer Science* **Expected December 2026**

*Bachelor of Science in Computer Science & Geographic Information Science* **Graduated May 2025**

- Coursework: Machine Learning, Cloud Networking, Computational Linear Algebra, Artificial Intelligence

## Work Experience

**Synchrony Financial** **May 2024 - Present**

*Automation & Reliability Engineering Intern* *Champaign, IL*

- Developed features to enhance app functionality for 30+ partner companies using React, PyCharm and Postman
- Tested 40+ RESTful APIs using Postman to improve reliability and reduce integration errors by 20%
- Deployed services on AWS to ensure scalable, production-ready delivery for 30+ client applications

**TIMAN Research Group** **August 2024 - Present**

*Research Assistant and Developer* *Urbana, IL*

- Engineered a Prolog-based medical knowledge base covering 80+ lab tests and 15+ diagnostic rules
- Built 20+ unit/integration tests with 95% rule coverage, improving system reliability and reducing logic errors
- Applied ML/NLP to enhance medical decision models, scaling to 1000+ patient records

**Ameren** **May 2022 - May 2024**

*Application Development & Data Science Intern* *Champaign, IL*

- Modeled 1,000+ acres of viable land for renewable energy projects using ArcGIS, Python and SQL
- Built a PowerApps & SQL dashboard used by 6+ internal teams to track 25+ renewable energy projects
- Collaborated across teams using Python, HTML/CSS, ArcGIS Pro, Databricks, and Microsoft PowerApps

**Data Science Discovery** **August 2023 - May 2024**

*Software Developer* *Urbana, IL*

- Developed a real-time student engagement web app using React and SQL backend for live polling and feedback
- Scaled system to 1,000+ concurrent users by optimizing request handling and database performance
- Saved $50k+ across two classrooms, with potential savings for 7.5k students annually compared to iClicker

## Projects

**Illini Map** **August 2023- December 2023**

*Software Developer* *Urbana, IL*

- Built a MaterialUI & Flask web app for dynamic campus event visualization

## Involvement

**CS Student Ambassadors/Research Scholars** **August 2023 - May 2025**

*Fellow & Research Assistant* *Urbana, IL*

- Earned competitive fellowship, gaining mentorship and  research placement with the TIMAN group
- Conducted AI/ML research on knowledge-based medical inference systems
- Promoted diversity in tech by mentoring women in CS/STEM and engaging in outreach to high school students

**Alpha Phi Omega** **September 2021 - May 2025**

*Technology Chair* *Urbana, IL*

- Managed and maintained fraternity website, ensuring up-to-date communication for 100+ members
- Developed leadership programs and digital tools to strengthen member engagement and skill-building

## Skills and Interests

**Languages & Frameworks:** Python, JavaScript, C/C++, HTML, CSS, SQL, MySQL, RESTful APIs, AWS, GCP
**Databases:** Relational Databases (SQL, MySQL), Knowledge Bases (Prolog)
**Testing & Tools:** PyTest, JEST, Postman, Git, Github, Agile, Scrum