

Lily Gniedziejko

Highland Park, IL | lilyg3@illinois.edu | www.linkedin.com/in/lilygniedz | <https://lilygn.github.io/> | <https://github.com/lilygn> | [Google Scholar](#)

EDUCATION

University of Illinois Urbana-Champaign, B.S. in Computer Science GPA: 3.98/4.00 | Expected Graduation: 05/2028

- Awards: Honored at the Siebel School of Computing and Data Science 2025 Celebration of Excellence (2x), Dunn Family Scholarship recipient, Engineering Visionary Scholarship recipient, Dean’s List (4x)

PUBLICATIONS

Jackson Clark, Yiming Su, Saad Mohammad Rafid Pial, Lily Gniedziejko, and Tianyin Xu. SREGym: A Live Training Ground for AI SRE Agents with High-Fidelity Failure Drills. In Proceedings of the 1st ACM Conference on AI and Agentic Systems (CAIS ‘26).

PROFESSIONAL EXPERIENCE

xlab, Research Intern working on <https://sregym.com/> (founding member)| Advisor: Tianyin Xu 06/2025–Present

- Designed misoperation as a new fault mechanism by deploying TiDB on Kubernetes and building an application for management-plane fault injection and mitigation.
- Implemented MCP observability tools for LangGraph agents, including Prometheus and Jaeger integrations.
- Built distributed testing infrastructure using tmux-based parallel execution across remote nodes and a JSONL-to-HTML trace visualization tool for agent evaluation and debugging.
- Designed and simulated distributed-system failures spanning network, control-plane, hardware, OS, correlated, and metastable faults.

Ciroos, AI Engineering Intern 05/2026-08/2026

- Built a scalable, multi-datacenter VXLAN/EVPN environment using virtualized switches running vendor network operating systems, along with a network fault-injection platform and YAML-driven topology configuration for training and evaluating AI agents.
- Developed a live fabric topology explorer that auto-discovers nodes and links and enables interactive execution of vendor CLI commands directly on network devices.
- Built a Prometheus telemetry pipeline and Grafana dashboards for real-time fabric monitoring and observability.
- Designed and implemented Kubernetes and multi-cloud infrastructure faults for AI SRE agent evaluation, and built a reflective prompt-optimization loop that improved a lightweight model’s RCA performance to match a frontier model.

Mueller, Software Engineering Intern 05/2025–09/2025

- Developed an internal chatbot that processes over 1,500 technical PDFs, including 400+ page manuals and engineering drawings, to assist the maintenance team, reduce downtime, and link directly to exact pages in source documents
- Created a Microsoft Teams bot that makes SQL queries and outputs Power BI Dashboards
- Implemented a full-stack application for data entry for autopour and melting machines

EXTRACURRICULARS AND LEADERSHIP

CS Student Ambassadors/Research Scholar | Ambassador & Researcher 07/2025–Present

- Represent Siebel School at events; mentor prospective students; conduct faculty-mentored research

Girls Who Code | Facilitator 09/2025–Present

- Developed and delivered K–12 coding curricula; mentored students to promote STEM equity

Phi Sigma Rho (STEM Sorority) | Risk Manager & Social Media Director 09/2024–12/2025

- Led risk management training and supported recruitment/service events

PROJECTS

SREGym (core team, <https://sregym.com/>) -> used by researchers at Microsoft Research, Resolve AI, the University of Washington, and SRE startups.

- Built AI SRE benchmark with challenging, high-fidelity SRE incidents using production-level cloud systems and software stacks (Kubernetes, MongoDB, etc.)
- Designed noise injection into the SRE incidents to further challenge AI SRE solutions with production cluster features
- Featured in Siebel News: <https://siebelschool.illinois.edu/news/sregym>

FleetCast - Satellite Operations Simulator (used by xLab)

- Built a real-time simulator for satellite telemetry and orbital passes with a station dashboard to display live satellite connections and telemetry data
- Powered by TiDB for data storage and fully containerized with Docker and Helm for deployment on Kubernetes in xLab

TECHNICAL SKILLS

- Computer Languages: Python, Java, JavaScript, C++, HTML, CSS, C#, SQL
- Tools: Kubernetes, Docker, Git, Containerlab, AWS, GCP, Power BI, React JS/Native, LangGraph/Chain, RAG, Microsoft Azure, CodeQL, .NET, Linux, OpenCV
- Languages: Polish (Native, Polish School Graduate), English (Native), Spanish (Professional Proficiency)