

# Lily Gniedziejko

Highland Park, IL | 224-461-2401 | lilyg3@illinois.edu | [www.linkedin.com/in/lilygniedz](https://www.linkedin.com/in/lilygniedz) | <https://lilygniedz.me/> | <https://github.com/lilygn>

## EDUCATION

**University of Illinois Urbana-Champaign, B.S. in Computer Science** GPA: 3.96/4.00 | Expected Graduation: 05/2028

- *Relevant Coursework (to be completed by Summer, 2026):* An Introduction to Computer Science I & II, Discrete Structures, Data Structures, Calculus II & III, Linear Algebra w. Computational Application, Physics Mechanics; Elec & Mag, Computer Architecture, Probability and Statistics for Computer Science, Software Engineering Lab
- *Awards:* Honored at the Siebel School of Computing and Data Science 2025 Celebration of Excellence, Dunn Family Scholarship recipient, Engineering Visionary Scholarship recipient

**Highland Park High School, Highland Park, IL** GPA: 4.66/4.0 | 2020-2024

- *Awards:* Salutatorian, Chamber of Commerce Scholarship

## TECHNICAL SKILLS

- *Computer Languages:* Python, Java, JavaScript, C++, HTML, CSS, Flutter
- *Tools:* Kubernetes, Docker, Keras, TensorFlow, Git, Firebase/Firestore, Power BI, React JS/Native, Matplotlib, Flask, LangGraph/Chain, RAG, Microsoft Azure
- *Skills:* Site Reliability Engineering, AIOps, Full-Stack Engineering, Machine Learning, Artificial Intelligence, Data Visualization, Web Scraping, Computer Vision, OpenCV, Streamlit, Panel
- *Languages:* Polish (Native, Polish School Graduate), English (Native), Spanish (Professional Proficiency)

## PROFESSIONAL EXPERIENCE

**Mueller, Software Engineering Intern** 05/25–09/2025

- 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 PowerBi Dashboards
- Implemented a full-stack application for data entry for Autopour and Melting machines

**Xlab, Research Intern under Professor Tianyin Xu | Systems and Site Reliability Engineering** 06/25–Present

- Implemented tools for LangGraph agents, including Jaeger and Prometheus observability tools with summarization, LLM-based output summarizers, and PostgreSQL compilation modules
- Created and deployed the Kubernetes-based application used for TiDB fault injection and mitigation
- Applied fault injection, localization, and mitigation techniques to TiDB application scenarios to evaluate system resilience and recovery behavior

## 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

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

- Led risk management training and supported recruitment/service events

**ACM & Women in Computer Science | Member** 09/2024–Present

- ACM (09/2024): Robotics workshops, HackIllinois, met to discuss AI adoption with startups and businesses
- WICS (01/2025): SQL/MongoDB workshops, peer mentorship on technical projects

**Girls Who Code | Facilitator** 09/2025–Present

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

## PROJECTS

**FleetCast – Satellite Operations Simulator**

- 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, Kubernetes, and Helm for deployment in the Site Reliability Engineering Lab (XLab)

**YouTube AI Assistant – Chrome Extension**

- Overlays YouTube with AI-generated summaries and quizzes using scraped transcripts and Langchain pipeline

**RSO Swiper & Research Lab Finder – React Native App**

- Built a swipe-to-save app with Firebase auth that filters RSO and lab cards using OpenAI embeddings based on user input; scraped UIUC CS sites and RSOs with BeautifulSoup and Cheerio

**ML Racing Line Optimizer -In Progress**

- Built a pipeline with FastF1 and Firebase to preprocess F1 telemetry and train BiLSTM models for condition-specific racing line prediction