LAUREN HYDE

</> lrhyde.github.io linkedin.com/in/lrhyde2 📞 571-594-7847 github.com/lrhyde ✉ lrhyde2@illinois.edu

EDUCATION

University of Illinois at Urbana-Champaign — May 2026
Bachelor of Science in Computer Science — *GPA: 3.97/4.0*

SKILLS

Languages: Python, JavaScript, TypeScript, C++, C, Java, HTML, CSS, SQL, R
Tools: React.js, Express.js, Git/GitHub, Flask, Node.js, MongoDB, Jest, Neo4j, Pandas, OpenCV, Linux, Android Studio

EXPERIENCE

d7 Data Science Research Collaborative | Back-End Developer — Oct 2023 - Present
- Helped create the Data Science Mastery Platform, a virtual learning platform based in Express.js, TypeScript, HTMX, and Node.js used by over 1,000 students each year in UIUC coursework
- Designed an API for running and grading student python code, refactored existing architecture, improved database integration using Sequelize.js, and created unit tests with Jest to contribute to platform robustness and scalability
- Automated the issuance of LinkedIn certificates to students, adding a new MicroCredentials interface for instructors

PayPal | Software Engineering Intern — Jun 2024 - Aug 2024
- Developed a tool to centralize regulatory compliance information using retrieval augmented generation
- Engineered an automated pipeline to ingest production code into Neo4j knowledge graph relationships
- Built a React.js user interface in which users can customize output format to their preferences, maximizing utility
- Designed a hybrid information retrieval method with Neo4j Cypher queries and custom vector searches specialized to specific compliance subdomains to find and filter relevant information

Hack4Impact x OpenAQ | Front-End Developer — Jan 2024 - May 2024
- Developed an educational website to interface with OpenAQ's API and provide AQI information in various locations
- Created interactive components using Solid.js with TypeScript and SCSS styling to compare and calculate AQIs

Hack4Impact x InclusiveSTEM | Full-Stack Developer — Sept 2023 - Dec 2023
- Worked with a nonprofit to build the largest online library of educational materials for people with disabilities
- Implemented the end-to-end organization verification flow, including creating several customized accessible components for people with visual impairments, using Express.js, MongoDB, React.js and Chakra UI

TJHSST Computer Systems Research Lab | RoboBoat Groundstation Lead — Aug 2022 - Jun 2023
- Built a fully autonomous robotic boat capable of completing various navigation tasks using computer vision
- Led the Groundstation team in developing a web interface for monitoring and control using Flask, HTML, and CSS

PROJECTS

PickMe: Restaurant Recommender | *React.js, Flask, Python, TypeScript, MongoDB, Git* — Jan 2024 - May 2024
- Developed a full-stack web app using KMeans clustering to recommend restaurants based on cuisine preferences
- Leveraged Geolocate and Google Places APIs to personalize results to the user's current location
- Designed a user management system using Google OAuth and MongoDB to store user's preferences and history

Classi | *Express.js, Node.js, SQL, HTML, CSS, JavaScript, Google Cloud Platform, Git* — Jan 2024 - May 2024
- Created an application to allow students to rank and save their favorite UIUC courses and view class data
- Implemented SQL database integration from multiple data sources with advanced data-driven functionalities like dynamically-updated keyword search, auto-saving courses by custom criteria, and analytics dashboard

SpotifAI | *JavaScript, HTML, CSS, Spotify API, Git* — Mar 2023 - Jun 2023
- Designed and built interactive web interface to synthesize and display statistics from a user's Spotify account
- Analyzed data from the Spotify API to provide users with insights on listening patterns for multiple time periods

RELEVANT COURSEWORK

Web App Development, Mobile App Development, Systems Programming, Computer Architecture, Software Design Lab, Database Systems, Data Structures, Artificial Intelligence 1&2, Computer Vision 1&2, Calculus III, Discrete Mathematics, Numerical Methods, Linear Algebra, Statistics and Probability, Research Statistics 1&2