Sophie Rollins

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Research Interests

My research lies in human-computer interaction, and my interests include AI literacy, data privacy, and the spread of information within online creative communities.

Education

2024 - Present **PhD student, Technology and Social Behavior**
Joint program in Computer Science and Communication
First-Year Cognitive Science Fellow, Graduate School of Arts and Sciences
Advisor: Prof. Duri Long
Northwestern University, Evanston, IL

2023 **Master of Science, Computer Science**
Northwestern University, Evanston, IL

2023 **Bachelor of Science, Computer Science**
Northwestern University, Evanston, IL

Publications

2024 **Knowledge Net: Fostering Children's Understanding of Knowledge Representations Through Creative Making and Embodied Interaction in a Museum Exhibit**
Sophie Rollins, Katherine Hancock, Jasmin Ali-Diaz, Nyssa Shahdadpuri, Duri Long.
C&C '24: Proceedings of the 16th Conference on Creativity & Cognition.

2023 **Fostering AI Literacy with Embodiment & Creativity: From Activity Boxes to Museum Exhibits**
Duri Long, *Sophie Rollins*, Jasmin Ali-Diaz, Katherine Hancock, Samnang Nuonsinoeun, Jessica Roberts, Brian Magerko.
IDC '23: Proceedings of the 22nd Annual ACM Interaction Design and Children Conference.

Research Experience

2023 – Present **Pre-Doctoral Scholar, Creative Interfaces Research + Design Studio**
Principal Investigator: Professor Duri Long, Northwestern University
Museum Exhibits to Foster AI Literacy
Developed a web application for two museum exhibits aimed at fostering AI literacy in middle school youth by teaching about knowledge representations and machine learning through embodied interactions. Built and trained a data-to-text NLG model to transform a semantic network into a story in order to demonstrate the possible creative outputs generated from knowledge representations.
Computational Embodiments
Researched and designed knowledge representations of the human body outside of the traditional skeletal model. Designed a deep motion editing tool which allows users to record a dance and visualize what that dance would look like when performed with varying levels of tension.

Teaching Experience

2022 **Peer Mentor, Introduction to Web Development**
Northwestern University, Evanston, IL

2022 **Peer Mentor, Generative Methods**
Northwestern University, Evanston, IL

Industry Experience

2022 **Software Engineering Intern**
Lyft, Inc., Remote
Improved communication surrounding the rider "rematch" experience through implementation of new messages and notifications that provide context to Lyft riders when they experience a driver cancellation or change. Collaborated with project managers, data scientists, and other software engineers to deploy a production-scale user experiment on the Lyft app in order to measure the impact of the new communications.

2020-2021 **Software Engineering Intern**
RightHand Technologies, Inc., Chicago, IL
Collaborated with team members and users to develop the RightHand Intranet System, a web application utilized internally by RightHand Technologies employees. Centralized data collection for RightHand Technologies by consolidating data collection forms, a timecard system, company calendars, a clock-in system, and other features vital to company operations into one comprehensive website.

Mentorship and Service

2020 – 2023 **Peer Adviser, New Student Experiences**
Northwestern University, Evanston, IL
Served as year-long mentor for groups of engineering students in the Northwestern classes of 2024, 2025, and 2026. Led McCormick First-Year Experience personal development course for engineering first-year students, teaching academic and professional success, as well as personal well-being.

2022 – 2023 **Program Director, Society of Women Engineers**
Northwestern University, Evanston, IL
Organized and promoted Northwestern SWE Industry Day, Northwestern's largest engineering career fair. Led the Professional Development committee, which hosts events to guide and advise undergraduate engineering students in gender minorities as they explore career opportunities.

Skills

Technical
Python, JavaScript, HTML/CSS, SQL, Git, Node.js, Microsoft Excel, MATLAB, machine learning (NumPy, Pandas, SciPy, scikit-learn, jupyter), data visualization (Tableau, Matplotlib).

Languages
English (fluent), Spanish (advanced).

Other Interests

Fibre arts (crochet, knitting, embroidery).