Michelle Star
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Education

University of Pittsburgh, *summa cum laude* - April 2026
Honors College, **School of Computing and Information**
Bachelor of Philosophy (BPhil) in Data Science, *Specialization in Data Analytics*
Minors: Computer Science, Theater Arts
Thesis: "Simulating the User: Multi-Turn Evaluations of Conversational AI Support Across Demographic Contexts"
Faculty Mentor: Dr. Yu-Ru Lin
Honors: David C. Frederick, *Honors Distinction*

Neapolis University Pafos, Cyprus - May 2025 Study Abroad Program in Political Science
Taylor Allderdice High School, Pittsburgh, PA - 2022 / *Valedictorian*

Research Interests

Undergraduate researcher with a technical and interdisciplinary background in data science, human-computer interaction (HCI), and accessible technology. Currently completing a BPhil thesis on conversational AI bias across demographics. Seeking PhD opportunities to advance research in socially responsible, user-centered computing.

Research Experience

***Undergraduate Researcher,* BPhil Thesis, University of Pittsburgh** 2025–Present
- Investigating support variance and emergent bias in LLMs across demographic subcommunities on Reddit
- Using NLP tools and multi-turn simulations to analyze linguistic sentiment and conversational behavior.
- Conducting original research to be defended before a faculty committee as part of the BPhil degree.

***Volunteer Research Assistant*, CivicWatch, PICSO Lab** 2025–Present
- Extracted and classified political discourse on social media for legislative transparency research.
- Worked on NLP modeling and front-end design to improve civic accessibility and reduce misinformation.

Internships

***Data Science Capstone*, Latitude AI (Ford Subdivision)** 2025–Present
- Designed and built a data pipeline to aggregate and analyze road work zone data from open-source sources across the U.S., supporting the safety of autonomous vehicle navigation.
- Processed and standardized diverse datasets to provide real-time construction zone awareness for integration into Ford's self-driving systems.

***UX/UI Designer*, Osher Lifelong Learning Institute** 2025–Present
- Leading a website redesign initiative to improve modernity, accessibility, and usability for an older adult audience.
- Conducted user experience research to identify pain points in the current interface, focusing on screen reader compatibility and intuitive information flow.
- Implementing accessibility best practices (WCAG) to ensure content is perceivable, navigable, and user-friendly for individuals with visual or cognitive impairments.

Leadership Experience

***Appointed Student Representative*, Academic Council, School of Computing and Information** 2025–Present
- Selected by the Dean as one of two undergraduates to represent the student body in school-wide curricular governance.
- Participate in monthly council meetings to review, deliberate, and vote on proposed changes to academic programs, degree requirements, and policies.

***Mentor*, Computer Science Club, University of Pittsburgh** 2025–Present
- Mentored 3 undergraduates in academic success, career exploration, and navigating the tech field.
- Offered guidance on course planning and research/internship opportunities.

***Mentor*, Women in Computer Science Club, University of Pittsburgh** 2025–Present

- Mentored 2 undergraduate students through 1:1 meetings to support academic success, and career exploration.
- Fostered confidence and retention of women in tech by sharing resources and facilitating networking opportunities.

Teaching Experience

***Program Director,* YMCA Camp Kon-O-Kwee Spencer** 2021-2025

- Directed experiential learning programs for 560+ participants.
- Mentored and evaluated a team of 15 staff, emphasizing skill development, iterative performance feedback.
- Partnered with healthcare professionals to co-develop accessible camp experiences for children with Hemophilia and Charcot-Marie-Tooth, incorporating accessibility principles into educational design.

***Extended Day Counselor*, St. Edmund's Academy** 2023-Present

- Independently facilitated structured after-school learning for 40+ students
- Acted as primary educator in the absence of teachers, supported behavioral needs across a diverse student population
- Provided individualized math tutoring and homework assistance to reinforce classroom learning.

Selected Projects

***Team Leader*, Kuzneski Innovation Cup** 2025

- Advanced a hackathon project to university-wide competition supporting early-stage student ventures with mentorship and potential funding.
- Preparing for final pitch presentation with a focus on real-world impact, user research, and venture scalability.

***Team Leader*, Wireless Innovation Hackathon for Accessibility** 2025

First Place Winner – $1,500 Prize

- Created a platform to simplify access to wheelchair-accessible vehicles (WAVs) using LLM-powered agents that contact transportation providers on users' behalf.
- Developed a working prototype in collaboration with a community member with Cerebral Palsy to ensure real-world relevance and usability.
- Built with Google Maps API integration, enabling route comparison and integrated WCAG-compliant UI features.
- Recognized for innovation, inclusive design, and societal impact by a cross-disciplinary panel of judges.

Automated Program Zone Form 2025

- Designed a rule-based scheduling system in Google Sheets using formulas, and conditional logic.
- Automated the assignment of 200+ campers to activities, reducing administrative workload by 10+ hours per week.
- Identified large program inefficiency and improved fairness by systematically balancing camper preferences and staff capacity.

Three Rivers Auto Data Science Consultant Final Project 2025

- Conducted full analysis of 1,800+ historical car listings to identify key factors influencing used car prices, acting as Data Science consultant.
- Built and compared multiple predictive models, including Linear Regression, Ridge, Lasso, Random Forests, GAM.
- Delivered technical and non-technical reports, translating statistical findings into actionable pricing insights for business decision-makers.

Prevalence of Heavy Drinking Survey Study 2025

- Developed a questionnaire covering demographics, alcohol use, consequences, and perceptions.
- Designed a cluster sampling method across 10 randomly selected fraternities/sororities
- Created plans to minimize non-response bias (reminders, incentives, weighting) and control measurement error.

Pitt Challenge Hackathon 2023

- Developed "*No Nurses Left Behind*," a social media platform aimed at combating medical professional burnout.
- Integrated an AI chatbot using Python to provide real-time emotional support.
- Winner of GoDaddy Register Prize

Presentations

***Higher Ed Student Spotlight*, The Global Impact Forum (TGIF)** 2025

- Selected to present as a student-led innovation project to an audience of 300+ global leaders across industries.
- The event featured networking, keynote speakers, and a showcase of interdisciplinary impact initiatives.

Awards & Scholarships:

Academic Merit Scholarship	2022-Present
Pittsburgh Public Scholar	2022-Present
Dean's List - School of Computing and Information	2023-Present
Portrait Master Award - La Roche College	2022

Skills: **Programming Languages**: R, Java, HTML, Markdown, Python, Mips, SQL, JavaScript
Tools & Environments: RStudio, Visual Studio, Git, Jupyter, Mars, Figma, Logism
Data Science Tools: tidyverse, ggplot2, caret, Pandas, Matplotlib, keyBert, huggingface

Extracurriculars:
Tech for Good, Recreational Climbing Club, 2025 Pittsburgh TechFest
Certifications: *Programming Foundations with JavaScript, HTML, and CSS* (Duke University, Coursera)