

Zexuan Li

CONTACT

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FIELD OF INTEREST

I am interested in exploring topics related to **human-AI collaboration**, **explainable AI** and **data visualization**. I am comfortable designing and executing **user studies**, **surveys**, and **interviews**; building **high-fidelity prototypes in Figma** and building **full-stack research systems (SvelteKit, AWS RDS, OpenAI APIs)**; analyzing large datasets using **Python or R**.

EDUCATION

University of Michigan, Ann Arbor, MI 08/2024 - present
Ph.D. in Information

Carnegie Mellon University, Pittsburgh, PA 08/2020 - 05/2024
B.S., Information Systems & Additional Major in Human-Computer Interaction

RESEARCH & PROJECTS

AnnotateThis A Human-Centered System for Domain Experts to Annotate Complex Concepts 08/2024 - present

Student Researcher

- Advised by Prof. Sabina Tomkins. Manuscript submitted to UIST under review.
- Designing and evaluating a human-centered annotation system to support domain experts in labeling complex, subjective concepts using large language models.
- Built the end-to-end system: SvelteKit frontend (Fly.io), AWS RDS/MySQL backend, OpenAI API integration.
- Presented in [NLP 4 Democracy Workshop at COLM](#), and [WiML Workshop at NeurIPS](#).

Divisi Interactive Data Visualization Tool Research Project 02/2024 - 09/2024

Student Researcher

- Advised by Prof. Adam Perer, CMU Data Interaction Group.
- Enhanced interactive data visualization tool Divisi for slice discovery tasks to help data scientists conduct model validation and error discovery. Conducted user study to evaluate tool.

PHORA Clinical Decision Support Tool (CDSS) Research Project 05/2023 - 05/2024

Paid Student Researcher

- Advised by Prof. Adam Perer, CMU Data Interaction Group.
- Designed and developed a CDSS with explainability features for risk assessment in Pulmonary Hypertension. Incorporated interactive visualizations that allows clinicians to explore how the prediction changes when patient values change, and use to educate patients.
- Prototype: <https://phora-user-study.web.app>

SurVis: System Design Project 01/2023 - 05/2023

Human-Computer Interaction (HCI) Capstone Project

- Conducted literature review on zoonotic disease reporting and One Health.
- Conducted think-aloud studies and semi-structured interviews with zoonotic disease researchers and veterinarians. Analyzed results with affinity diagram and empathy map.
- Designed a zoonotic disease reporting platform for reporting, tracking, and communication. Validated design through usability testing with veterinarians.

New Sun Rising: Data Collection Tool Development 01/2023 - 05/2023
Information Systems (IS) Capstone Project

- Collaboratively developed a data collection tool connected to organization database.

Penrose Open Source Project Contribution 11/2022 - 12/2022
CMU 17-313 Foundations of Software Engineering Course Project

- Contributed to open source mathematical diagrams generation tool Penrose, extending import/export functionalities for SVG images.

PUBLICATIONS

Venkatesh Sivaraman, **Zexuan Li**, Adam Perer. Divisi: Interactive search and visualization for scalable exploratory subgroup analysis. In Proceedings of the 2025 CHI Conference on Human Factors in Computing Systems (CHI '25)

Zexuan Li*, Katelyn Morrison*, Shuyi Han, Jidapa Krajangka, Charles Fauvel, Priscilla Correa-Jaque, Rebecca Vanderpool, Yongqi Liu, Shili Lin, Adam Perer, Allen Everett, Manreet Kanwar, and Raymond Benza. "Designing and Understanding What-if Explanations in an Interactive Clinical Decision-Support Tool for Pulmonary Hypertension Outcome Risk Assessment and Treatment Guidance." Pulmonary Vascular Research Institute Annual Congress 2024.

WORK EXPERIENCES

Honeycomb Credit 05/2022 - 07/2022
Product Data Analyst Intern

- Analyzed company investor, campaign, and marketing data to refine product strategy and marketing approach.
- Successfully performed 16 analyses with R on disparate datasets within 2 months.
- Created data visualizations, interactive dashboard, and presentations for marketing, sales, finance, product teams. Presented results to C-suite.

CMU Summit on US-China Innovation and Entrepreneurship 09/2020 - 05/2024
Conference Lead and Designer

- Organized the Future Technology Summit 2022 with Shanghai Jiao Tong University.
- Organized the Robotics panel in the 2021 CMU Summit.

TEACHING & SERVICE

Teaching Assistant, CMU 67-240 Mobile Web Design & Development 09/2023 - 12/2023

Student Volunteer, ACM Interactive Surfaces and Spaces (ISS) 11/2023

Guest Speaker, CMU Information Systems Research Colloquium 09/2022 & 09/2023

SKILLS

Research Methods

Systematic literature reviews; contextual inquiry; think-aloud studies; semi-structured interviews; usability testing; heuristic evaluation

Relevant Coursework

(CMU) 05-839 Interactive Data Science, 05-650 & 05-651 Interaction Design Studio I & II, 05-410 User-Centered Research and Evaluation, 05-434 Applied Machine Learning, 11-785 Deep Learning, (UM) ECE-598 Large Language Models, SI-671 Data Mining, CSE-594 Human-AI Interaction

Programming Languages, Libraries, & Frameworks

Python, Java, C, Linux, R, HTML, CSS, JavaScript, AWS RDS (MySQL), MongoDB, Fly.io, Pandas, Svelte, Google Cloud Platform & Firebase, Jupyter Notebooks, Google Colab, Streamlit, Altair