Yijun Liu

Ph.D. Student, Siebel School of Computing and Data Science University of Illinois at Urbana-Champaign

yijunliu523.github.io · yijun6@illinois.edu · Champaign, IL, USA

Research Interest

Human-computer interaction; human-AI collaboration; intelligent writing support; social computing; visualization

Education

 $\label{thm:champaign} \textbf{University of Illinois at Urbana-Champaign}, \textbf{Champaign}, \textbf{IL}$

2024/08

Ph.D. in Computer Science

Emory University, Atlanta, GA

2020/08 - 2024/05

B.S. in Computer Science (honors); B.S. in Quantitative Sciences in Sociology; 3.99/4.0 Honor Thesis: CodeCuddle: Automating Inclusive Web Design with Large Language Model advised by

Research Experience

Dr. Chinmay Kulkarni

Graduate Researcher, University of Illinois at Urbana-Champaign, Champaign, IL

2024/08

• Language Interaction Lab

Advised by Prof. Tal August; topic: AI writing support

SCUBA Lab

Advised by Prof. Eshwar Chandrasekharan; topic: conversation visualization (social computing)

Undergraduate Researcher, Emory University, Atlanta, GA

2021/12 - 2024/05

• Future Tense Lab

Advised by Prof. Chinmay Kulkarni; topic: LLMs in code generation (undergrad thesis)

• CAV Lab

Advised by Prof. Emily Wall; topic: cognition and visualization

• Center for Data Science

Advised by Prof. Vicki Hertzberg and Prof. Joyce Ho; topic: machine learning in health

Undergraduate Research Intern, Tufts University, Medford, MA

2022/05 - 2022/08

• Tufts Security and Privacy Lab.

Advised by Prof. Daniel Votipka; topic: cybersecurity education

Undergraduate Research Fellow, Emory University, Oxford, GA

2021/06 - 2021/08

• SORS Research Fellow.

Advised by Prof. Ting Li; topic: mobile crowdsourcing

Publications

- [4] **Yijun Liu**, Mustapha Oloko-Oba, Kathryn Wood, Michael S. Lloyd, Joyce C. Ho, Vicki Stover Hertzberg. (2024). Predicting Atrial Fibrillation Ablation Outcomes: A Machine Learning Approach Leveraging a Large Administrative Claims Database. Preprint on Medrxiv.
- [3] Mustapha Oloko-Oba, **Yijun Liu**, Kathryn Wood, Michael S. Lloyd, Joyce C. Ho, Vicki Stover Hertzberg. (2024). Machine Learning-Based Identification of High-Risk Patterns in Atrial Fibrillation Ablation Outcomes. Preprint on Medrxiv.
- [2] Mengyu Chen, **Yijun Liu**, Emily Wall. (2024). Unmasking Dunning-Kruger Effect in Visual Reasoning and Visual Data Analysis. In 2024 IEEE Visualization Conference (VIS'24).
- [1] Jiahui Jin, **Yijun Liu**, Ting Li. (2023). Redesigning Mobile Crowd Sensing's Selection Logic to Ensure Participant's Diversity. In 2023 IEEE International Performance Computing and Communications Conference (IPCCC'23).

Talk

A Student Observatory for Cybersecurity Education Research

Grace Hopper Celebration 2022; Hosted by CRA-WP

One-to-One and One-to-Multiple User-Task Mapping in Task-Abundant Mobile Crowd Sensing 2021 Georgia Undergraduate Research Conference

Teaching Experience

Data Structure and Algorithms, Teaching Assistant

Emory University, Fall 2022

Taught 4 exam review sessions for 60+ students; provided feedback for students' assignments and exams

Emory Oxford Writing Center, Lead Writing Consultant

Emory University, 2021/01 - 2021/12

Guided students of varied English abilities and backgrounds in academic writing across disciplines; mentored new writing consultants by leading weekly discussion.

Service

Web Developer

AAAI 2024 Workshop: LLMs4Bio

SIGKDD 2022

Student Volunteer

SIGKDD 2022

Emory University

Oxford Student Government Association; Vice President of Internal Affairs

Award and Recognition

Emory Outstanding CS Student of the Year	2024
Emory Phi Beta Kappa	2024
Google CS Research Mentorship Recipient	2023
Emory Dean's List	2020 - 2023
SIGKDD Student Travel Award (\$800)	2022
CRA-WP Student Travel Award (\$2,000)	2022
Emory Quantitative Science Distinction Award	2022
ASA DataFest @ Emory Best Insight Award	2022
ASA Fall Data Challenge Best Undergraduate Overall Award	2021

Skill

Languages: Java, Python, C/C++, HTML/CSS(CSS3, SASS)/ JavaScript(React, Angular), SQL, Mathematica, TypeScript

Technologies/Frameworks: Node.js, PHP, Flask, FastAPI; MySQL, NoSQL, MongoDB, PostgreSQL; Heroku, Netlify; GCP, AWS; Chrome Extension, Figma, FlowXO, WordPress, WeChat Mini Program, SAS; sklearn, TensorFlow, PyTorch, Keras

Statistical Analysis & Visualization: R, D3.js, Tableau; Adobe Photoshop/InDesign/ Illustrator/After Effects