

Yijun Liu

Decatur, GA 30033

(757) 618-3505 yijun.liu2@emory.edu liuyijun.com

EDUCATION

Emory University, Emory College, Atlanta, GA

Expected May 2024

B.S. in Computer Sciences; B.S. in Quantitative Social Sciences in Sociology

GPA: 3.99/4.0

Relevant Coursework: Human-Computer Interaction, Software Engineering, Artificial Intelligence, Database Systems, Data Structure and Algorithms, System Programming, Computational Linguistics, Computer Architect, Statistical Computing, Probability & Statistics

RESEARCH EXPERIENCE

Cognition and Visualization Lab @ Emory, Atlanta, GA

Dec 2021 – Present

Research Assistant, Computer Science Department, PI: Emily Wall

- Investigating the Dunning–Kruger effect in categorizing tasks through visualization
- Developing, modifying, and implementing an eye tracker (Webgazer) to the interface (InterAxis) for user experiments via D3.js
- Conducting data analysis via Python on interactive data logs of users to trace the Dunning–Kruger effect and on eye tracking data to calculate the accuracy of Webgazer
- Publication is in progress

Nell Hodgson Woodruff School of Nursing at Emory, Atlanta, GA

Aug 2022 – Present

Research Assistant, Center for Data Science, PI: Vicki Hertzberg & Joyce Ho

- Conducting data cleaning for large electronic health record data via SAS and SQL
- Calculating comorbidity indexes and implementing machine learning models in categorization on predicting the risks of atrial fibrillation ablation for future occurrences of atrial fibrillation

Tufts Security and Privacy Lab, Medford, MA

May 2022 – Aug 2022

Research Assistant, Computer Science Department, PI: Daniel Votipka

- Independently developed a Chrome extension to monitor browser activities, including the URL of visited sites and the percentage of the page viewed via HTML/CSS/JavaScript(jQuery). The extension also contained a built-in stopwatch, designed to pop up a web survey after each visited page, and could export an excel file documenting the monitored activities
- Constructed a web scraper to capture the information from the recorded URLs via Python, utilizing Scrapy, Pandas, Selenium, and urllib

Summer Oxford Research Scholar, Oxford, GA

Jun 2021 – Aug 2021

Research Fellow, Computer Science Department

- Conducted independent research in mobile crowdsensing; investigated and developed algorithms that can be used to map tasks to users, worked with greedy and bipartite matching algorithms

- Stimulated multiple task-abundant scenarios and compared the performances among the algorithms developed
- Publication is in progress

Google CS Research Mentorship Scholar

Feb 2023 – Present

- Accepted to Class 2023A

PRESENTATIONS

2022 Grace Hopper Celebration, Orlando, FL, September 2022. Yijun L., James M., Daniel V. "A Student Observatory for Cybersecurity Education Research" ([Lecture](#))

2021 Georgia Undergraduate Research Conference, Virtual, November 2021. Yijun L. "One-to-One and One-to-Multiple User-Task Mapping in Task-Abundant Mobile Crowd Sensing" ([Poster](#))

SORS 2021 Summer Undergraduate Symposium, Virtual, August 2021. Yijun L. "One-to-One and One-to-Multiple User-Task Mapping in Task-Abundant Mobile Crowd Sensing" ([Poster](#))

Zeal Labs 2019 Symposium, Shanghai, China, August 2019. Yijun L., Fangge C., Aisheng H. "POTS Modification on FAU Membrane for Oil/Water Separation" ([Poster](#))

WORK EXPERIENCE

Sociology Department at Emory, Atlanta, GA

Aug 2022 – Present

Research Assistant for Dr. Angela Dixon

- Conducting literature reviews on U.S. households and Black-White disparities in mortality and educational attainment, particularly utilizing AI software such as [elicit.org](#)
- Cleaning literature database via Python, successfully removing all the duplicates in the database, shrinking the size down by 80%
- Visualizing data in 7 Pew Research Center articles and creating 50 visually appealing slides for presentations on U.S. households

Computer Science Department at Emory, Atlanta, GA

Aug 2022 – Dec 2022

Teaching Assistant for CS 253 Data Structure and Algorithms

- Hosted office hours to answer students' coding questions, debug, and help students to review lectures and taught final review sessions for students preparing for final exams
- Graded programming assignments and provided constructive feedback to students

Oxford College Writing Center, Oxford, GA

Jan 2021 – Dec 2021

Writing Consultant

- Met individually with students with various backgrounds and language abilities to improve their writing process and think critically at different stages
- Facilitated writing in all genres and forms, including academic, personal statements, and lab reports
- Worked as the lead consultant in the fall 2021, mentoring and leading group discussions among writing consultants

LEADERSHIP/SERVICE

SIGKDD Conference 2022

Dec 2021 – Aug 2022

Web Team Volunteer

- Built the website for SIGKDD via HTML/CSS/JavaScript; continuously updated the website per requests from the organizing team

Student Government Association, Oxford, GA

Aug 2021 – Dec 2021

Vice President of Internal Affairs

- Chaired the inventory committee, which works closely with club presidents to ensure their needs are met, and oversees the inventory in the SGA closet; created an online form to better utilize reusable items
- Maintained the SGA website and keep electronic files accessible and up to date

Zeal Labs, Shanghai, China

Nov 2019 – Jul 2020

Student Board

- Involved in the admission process; reviewed applications, and interviewed 12 students
- Mentored selected high school students participating in the program who were conducting research in the natural sciences; helped develop academic posters and final presentations which were then presented at the Zeal Lab Symposium

HONORS AND GRANTS

Dean's List (2020-2022)

Quantitative Science Distinction Award (2022)

ASA DataFest @ Emory Best Insight Award (2022)

KDD Student Travel Grant (2022)

CRA Student Travel Grant-Grace Hopper Celebration (2022)

ASA Fall Data Challenge Best Undergraduate Overall Award (2021)

TECHNICAL SKILLS

Languages: Java, Python, C, C++, HTML/CSS(CSS3, SASS)/ JavaScript(React.js, AngularJS), SQL(PostgreSQL), Mathematica

Technologies/Frameworks: Git, SAS, GCP, Chrome Extension, Figma, FlowXO, WordPress, WeChat Mini Program, LaTeX

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