Samika Gupta

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https://github.com/samika2000 | https://samikagupta.github.io/

EDUCATION

University of Michigan-Ann Arbor   August 2022 - Present
Ph.D. student in Computer Science and Engineering
Advisor: Prof. H. V. Jagadish
University of Wisconsin-Madison   September 2019 - May 2022
Bachelor of Science: Computer Science, Data Science   GPA: 3.67/4.0
Environmental Studies Certificate

RESEARCH INTEREST
- Responsible Data Science; Data Engineering; Data Wrangling Techniques

PUBLICATIONS

Mitigating Subgroup Unfairness in Machine Learning Classifiers: A Data-Driven Approach
Yin Lin, Samika Gupta, H. V. Jagadish
ICDE - 40th IEEE International Conference on Data Engineering, 2024.
IN SUBMISSION
The Impact of Bin Boundaries on Data Analysis
Samika Gupta, H. V. Jagadish

EXPERIENCE

Graduate Research Assistant—*University of Michigan-Ann Arbor CSE*   *Aug. 2022 - Present*
- Leading independent research projects evaluating the impact of missing data and data discretization.
- Developed project workflows for efficient data transformation and evaluation of ML/fairness related tasks using Python libraries. Fully participated in the testing and development of algorithms that target possible bias mitigation.
- Worked collaboratively on streamlining the machine learning pipeline to measure the impact of data augmentation over subgroup group fairness.

Undergraduate Research Assistant—*UW-Madison Statistics Department*   *Feb. 2021 - Aug. 2022*
(Wisconsin Science & Computing Emerging Research Stars)
- Constructed epidemiological contact network models using Python libraries
- Implemented models of vaccination strategy and vaccine hesitancy built on previous network code base. Applied vaccine model to county-level data using from the Wisconsin Health Dept. to confirm model accuracy.

Peer Mentor (*Data Programming I*)—*UW-Madison CS Department*   *Sept. 2020 - June 2021*
- Assisting students during Office Hours with programming problems or debugging issues in Python. Leading weekly lab discussion sections with 30+ students on course materials

Insurance Engineering Team Apprentice—*Expedia Group*   *June 2018 - Aug 2018*
- Developed a SpringBoot web application and designed the UI for displaying information from insurance databases for the viewing of the business team.

SKILLS
- Proficient in Python, R, Java, C, SQL, Linux, Javascript, HTML, CSS, and ML Fairness
- Proficient using Github, Tableau, Microsoft and Google Applications
- Languages: Hindi (native proficiency), French (conversational)

SERVICE ACTIVITIES
VoiCSEs- *Board Member*   *August 2023 - Present*
- Creating events and initiatives to support underrepresented graduate students in CSE and supporting DEI missions at the University of Michigan