

Samika Gupta

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<https://github.com/samika2000>

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
Environmental Studies Certificate

GPA: 3.67/4.0

PROGRAMMING LANGUAGES

- Proficient in Java, Python, C, R, SQL, Linux, Javascript, and HTML, CSS

SKILLS

- Languages: Hindi (native proficiency), French (conversational)
 - Proficient using Github, Tableau, Microsoft and Google Applications
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EXPERIENCE

Undergraduate Research Assistant—UW-Madison Statistics Department

February 2021 - Present

(Wisconsin Science & Computing Emerging Research Stars)

- Constructed epidemiological contact network models using Python libraries by compiling knowledge from related research papers to compare the spread of disease on varied network topologies
- Implemented models of vaccination strategy built on previous Python network code base in order to simulate the effectiveness of these strategies in containing the spread of infections over time
- Developing models to replicate the prevalence of vaccine hesitancy during an epidemic using research to capture known characteristics of vaccination and infection rates in communities based on hesitancy.
- Applying vaccine hesitancy model to county-level data using from the Wisconsin Health Dept. to confirm accuracy of the model

Peer Mentor (Data Programming I)—UW-Madison CS Department

September 2020 - June 2021

- Assisting students during Office Hours with programming problems or debugging issues in Python and answering conceptual programming questions
- Leading weekly lab discussion sections on course materials

Insurance Engineering Team Apprentice—Expedia, Bellevue, WA

June 2018 - August 2018

- Developed a SpringBoot web application displaying information from insurance databases for the viewing of the business team.
 - Designed the UI for the application using Javascript, HTML, CSS and worked on the backend of the application in Java
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ACTIVITIES

UW Data Challenge 2021- UW Madison Statistics Club

September 2021 - October 2021

- Wrote programs in R and Python to clean data and utilized multiple statistical models such as linear regression and k-nearest neighbors to predict the price of grocery store items

FIRST Robotics (Team 1318)- Co-Captain, Strategy Lead, Programmer

September 2016 - June 2019

- Worked in a team to design and implement a program to track robot information using SQL databases, Android frontend UI, HTML server application and Python graphing libraries for visualizations.
- Managed day-to-day responsibilities such as leading team meetings, communicating with members, making team decisions on scheduling, resource allocation, robot design, etc
- Led the data analysis and strategy discussions on the team for 2 years as Strategy Lead
- Volunteering at team outreach events and promoting STEM in the local community.

Wisconsin Autonomous- Member

September 2019 - September 2020

Ceramics Club- Board Member
Issaquah Salmon Hatchery- Student Docent

September 2019 - March 2020
May 2017- May 2018