

Navpreet Kaur

☎ (347) 445-2775 ✉ navkaur1026@gmail.com 🔗 [linkedin.com/in/navpreet-kaur-005a46185/](https://www.linkedin.com/in/navpreet-kaur-005a46185/) 🌐 nkaur15.github.io

EDUCATION

The City College of New York

Master of Science in Applied Mathematics

Courses: Topics in Applied Mathematics, Topics in Pure Mathematics

Expected Graduation: 05/26

GPA: *In Progress*

Fordham University

Bachelor of Arts in Mathematics/Economics, Minor in Computer Science

Courses: Statistics & Probability, Linear Algebra, Numerical Analysis, Real Analysis, Data Structures, Data Mining, Programming for Math & Science

Graduated: 05/22

GPA: 3.60

SKILLS

Languages: Python, C++, R, MATLAB, SQL, Shell

Softwares: Power BI, Alteryx, Tableau, GitHub, LaTeX

Other: HTML, CSS, Linux, Git, Amazon S3, Amazon Redshift, Vim

EXPERIENCE

Fordham University, *Research Collaborator*, New York, NY

Jul 2024 - Present

- Testing the developed federated learning algorithm on various case studies to show the framework's adaptability.
- Researching vulnerabilities in LLMs and third-party model providers to begin a new research project.

AH Infotech LLC/Sony Music Entertainment, *Data Analytics Consultant*, New York, NY

Aug 2022 - Present

- Cut data processing and loading time for the financial systems dashboard by 98% by building a database-based dashboard and improving the accuracy of the load process and data displayed.
- Implement changes to ETL scripts to improve data quality and accuracy of data points received from distributing partners (Spotify, Apple Music, TikTok, etc.)

Microsoft Research Data Science Summer School, *Student Researcher*, New York, NY

May 2022 - Jun 2022

- Replicated results and models from published papers using different datasets to compare findings and extended on the results to answer new questions using R (tidyverse, ggplot) and statistical methods.
- Collaborated with other students on GitHub to solve problems using R, Linux, and statistics.

Fordham University, *Research Assistant*, New York, NY

Jun 2021 - May 2022

- Reviewed and tested the produced optimization frameworks on case studies and real-world data using MATLAB to generate visual plots and confirming the desired results.
- Researched methods to prove the federated learning algorithm used to produce the optimal transport framework in a large population network.

PROJECTS

Fordham University Prep for Industrial Careers, New York, NY

Jan 2022 - May 2022

- Worked with liaisons from Red Ventures to create a MVP of an article summarizer and recommender on a dataset of 1176 articles provided by the team.
- Created a recommender that used a soft cosine similarity matrix to determine the similarity between each of the articles from the dataset.

Google Research's Tristate ExploreCSR 2021, New York, NY

Feb 2021 - Apr 2021

- Won second place for creating and presenting a poster on the topic of fair resource allocation using optimal transport.
- Implemented the fair optimal transport framework for various case studies and generated graphs modeling the results in MATLAB.

PUBLICATION

N.Kaur, J.Hughes, & J. Chen. VaxEquity: A Data-Driven Risk Assessment and Optimization Framework for Equitable Vaccine Distribution. *2022 56th Annual Conference on Information Sciences and Systems (CISS)*.

AWARDS & HONORS

- Pi Mu Epsilon Honor Society 2022
- Second Place at Google Research's Tristate ExploreCSR 2021

LANGUAGES

- Punjabi (*Native*)
- Hindi (*Full Professional Proficiency*)
- Spanish (*Limited Working Proficiency*)