

Madiha Mariam Ahmed

Artificial Intelligence (AI) Enthusiast

Data Engineer and Researcher skilled in data analysis, visualization, and statistics. Foundationally trained in probabilistic Machine Learning. Proficient in data manipulation, exploratory analysis, and understanding models/algorithms mathematically. Experienced in interdisciplinary research using Python frameworks like NumPy, Pandas, Matplotlib, Seaborn and PyTorch. Committed to continuously expanding my knowledge and skills. Actively seeking a position where I can make meaningful contributions to society.

✉ madiha1ahmed@gmail.com

☎ +1 (905) 325 1764

📍 Thorold, Canada

WORK EXPERIENCE

Data Engineer DigiBiomics

07/2024 - Pr Mississauga, ON
DigiBiomics pioneers medical innovation by employing AI and ML to transform medical data analysis

Tasks

- Collect, pre-process and analyse data for projects related to mental health and lung disease.
- Assess existing healthcare processes to identify integration points for ML and AI.
- Collaborate with healthcare professionals, data scientists, and IT teams to ensure data accuracy, relevance, and compliance for AI models.
- Design technical solutions aligning with the company's strategic goals.
- Act as a liaison, communicating technical solutions to non-technical stakeholders and gathering feedback.

Contact : Dr. Meraj Khan - meraj.khan@digibiomics.com

Graduate Research Assistant Computer Science, Brock University

06/2023 - 05/2024 St. Catharines, ON
Achievements

- Involved in AI-driven research for multi-target drug design, under a prestigious Federal AI for Design Challenge program.
- Our collaborative research article, titled " 'Several Birds with one stone': Exploring the Potential of AI Methods for Multiple-Target Drug Design", has been submitted to various esteemed academic conferences (NeurIPS, BMC and ISMB) and is currently under review.
- Worked on a counter-docking project for the research article

Contact : Dr. Yifeng Li (Canda Research Chair) - yli2@brocku.ca

Graduate Teaching Assistant Mathematics and Statistics, Brock University

01/2022 - 04/2024 St. Catharines, ON
Achievements

- Proficient in enabling conducive learning atmospheres
- Adeptly resolved academic inquiries for student success
- Evaluated assignments and projects using Crowdmark software
- Facilitated Math Learning Center Hours and weekly labs
- Assisted students with Statistics assignments, Python Programming, and Maple Software.

EDUCATION

Master of Science in Mathematics and Statistics (Thesis)

Brock University

01/2022 - 01/2024 Percentage: 92%

Bachelor of Technology (Honors) in Data Science Jain University

08/2017 - 08/2021 GPA: 8.183

SKILLS

Python Programming

Mathematics and Statistics

Data Analysis and Visualization

Machine Learning

Interdisciplinary Research

Teamwork

Continuous Learning

Communication

Conference Presentations

CONFERENCE PRESENTATIONS

Faculty of Mathematics and Science (FMS) Graduate Conference (09/2023)

Presenter for "Attention-based molecular generative model integrated with Deep Evolutionary Learning for multi-objective drug design"

3 Minute Thesis (3MT) (04/2023)

Presenter for "AI-Generative model for de novo multi-target drug design for Cancer". Qualified as top 7 for second round within Brock University

Faculty of Mathematics and Science (FMS) Grad Conference (09/2022)

Presenter for "Deep Clustering of high-dimensional and complex molecular data"

ACADEMIC SCHOLARSHIPS

Match of minds 2023 (05/2023)

DGS Spring Research Fellowship (04/2023)

International Fellowship (01/2022)

Graduate Fellowship (01/2022)

DIPLOMA CERTIFICATE

Bioinformatics - Algorithms and Applications (01/2021 - 04/2021)

Indian Institute of Technology - Madras (IIT-M)

LANGUAGES

English

Full Professional Proficiency

French

Limited Working Proficiency

INTERESTS

Teaching

Reading

Coding

Crochet

Baking

Volunteering