Arun Sharma

Contact Information

200 Union St SE
Minneapolis, MN 55455

Website: https://arunshar.github.io/portfolio/
Email: sharm485@umn.edu

Research Interest

Responsible AI, Machine Learning, Data Mining, Distributed Systems, Database Systems

Education

University of Minnesota, Twin Cities — September 2018 - Present
Ph.D. Candidate in Computer Science
Advised by Prof. Shashi Shekhar

University at Buffalo, New York — September 2016 - May 2018
MS in Computer Science

Gautam Buddha University, India — July 2011 - July 2016
BTech and MTech in Computer Science and Engineering

Appointments

University of Minnesota Twin Cities, MN — Jan 2020 - Present
Graduate Research Assistant

University of Minnesota Twin Cities, MN — September 2018 - December 2019
Graduate Teaching Assistant

NASA Ames Research Center Mountain View, CA — May 2017 - August 2017
Graduate Project Assistant

Peer Reviewed Publications

[1] **Analyzing Trajectory Gaps for Possible Rendezvous Regions**
ACM Transactions in Intelligent Systems and Technology, 2022
Arun Sharma and Shashi Shekhar

[2] **Analyzing Trajectory Gaps for Possible Rendezvous: A Summary of Results**
11^{th} *International Conference in Geographic Information Science, 2021 (Oral)*
Arun Sharma, Xun Tang, Jayant Gupta, Majid Farhadloo and Shashi Shekhar

[3] **WebGlobe: A cloud-based framework for interacting with climate data**
International Workshop on Analytics for Big Geospatial Data (SIGSPATIAL) 2018
Arun Sharma, SM Arshad Zaidi, Varun Chandola, Melissa R Dumas, Budhendra L Bhaduri

Teaching Experience

CSCI 5715 Spatial Data Science — **Fall 2019**
Graduate Student Instructor with Prof. Shashi Shekhar

CSCI 5708 Advanced Database Systems — **Spring 2019**
Graduate Student Instructor with Prof. Shashi Shekhar

CSCI 4041 Data Structures and Algorithms — **Fall 2018**
Graduate Teaching Assistant with Nathan Taylor

Invited Talks

Identifying Aberration Patterns in Multi-attribute Trajectory Data with Gaps
GIS Day, 2020, University of Maryland, College Park

Services and Leadership

Monitoring COVID-19 for Minnesota Management and Budget — 2020-2021
Reporting State-Level Mobility Traffic to Research Scientists and Policymakers

UofM Talented Youth in Mathematics Program Mentor — 2020-2022
Advised high school students who are considering a career in research

Technical Experience

PyTorch, Tensorflow, Keras, OpenCV, Numpy, Pandas, Spark, Tableau, Android, ArcGIS