

Narrative Summary of Research

My research is in the field of Big Data, Machine Learning, and Data Analytics. I have been actively involved in research related to these fields in collaboration with faculty and students in Clarkson University and undergraduate students in our department.

Since my last reappointment (last Spring), I published 1 new peer-reviewed publication, entitled “Understanding Public Response to Air Quality using Tweet Analysis” in Social Media & Society Journal. My work was also presented in a major conference, the American Association for Aerosol Research, in October 2019, as a platform presentation. Additionally, I was actively involved in co-advising a PhD student in Clarkson University on research related to large sensor network data. This work was presented in two conferences, RAPS conference in Clarkson University (April 2019), and 13th Annual Probability and Statistics Day at the University of Maryland Baltimore County (April 2019). Recently, my work was accepted for a poster presentation in an international conference (Air Sensors International Conference) that will be held in May 2020. I submitted a pre-proposal to the Health Effects Institute (HEI) for the use of data analytics to extract public-health related information from air quality sensor data.

I was a co-organizer and instructor for a 5-day international workshop on Sensors and Data Analytics in August 2019. This workshop was attended by researchers and students from 5 universities/institutes. I was the core instructor for the sessions on practical Data Analytics.

I attended a workshop on Statistics called Bayesian Decision-Making and Applications in Clarkson University in April 2019. This workshop has been very helpful in my developing the new Machine Learning course that I’m currently offering. I also presented a seminar in our department entitled, “Data Visualization” in November 2019. This seminar was attended by almost the entire computer science department and was very well received.