

Jingmin Sun

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EDUCATION

- **Carnegie Mellon University(CMU)**, PITTSBURGH, PA
Ph.D. in Mathematics Aug. 2020- present
- **Rensselaer Polytechnic Institute(RPI)**, TROY, NY **GPA: 3.98/4.0**
Bachelor of Science in Mathematics Aug. 2017 - Dec. 2019
Ph.D. candidate in Mathematical Science Department Jan. 2020 - May. 2020

PROJECTS

- **Sticky Brownian Motion, RPI** Feb. 2020 - May. 2020
 - Analyze and simulate the process of Brownian Motion
- **MortalityMinder, RPI** July. 2019 - Sep. 2019
 - Impute the missing Mortality rate and social determinants
 - Utilize machine learning algorithm to find the most important social determinants related to different causes of mortality
 - Develop website to visualize the data and design the User Interface.
- **Auto Life-Saver (Making plans for Drones to Disaster Relief)** Feb. 2019
 - Identify the best location(s) of ISO cargo containers on Puerto Rico , i.e. the droneGo disaster response system, to provide sufficient medical supplies and video reconnaissance.
 - Design the packing configuration of drones in each ISO cargo container and set of medical packages in each drone Cargo, that will meet the requirements of medical packages in different delivery locations after Puerto Rico hurricane.
 - Provide the delivery routes, schedules and flight plans for drones to satisfy medical package requirements and enable the use of video cameras in each delivery location
- **Driving on Electric Vehicles, MCM** Jan. 2018
 - Analyze the growth pattern of Tesla in urban and rural areas, and connect it to different local factors.
 - Build a simulation model to simulate the Tesla's energy use and distributions of charging stations.
 - Build an evaluation model to rate the performance of each design related to its cost and efficiency.
 - Connect our models to the real-life cases and take specific regions as examples.

RESEARCH INTEREST

- **Scientific Computing And Numerical Analysis**
- **Operations Research and Optimization**
- **Data Science**

Technical skill:

- Program language: Experience with C, C++, Java, Matlab, R, AMPL
- Web development: HTML, CSS, Javascript
- Typing: Latex writing
- Language: Native speaker in Chinese; English