Jingmin Sun

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OBJECTIVE

To apply for a Ph.D. program in **Applied Mathematics** or **Computational Optimization**

EDUCATION

Rensselaer Polytechnic Institute (RPI), TROY, NY

- Candidate for a Bachelor of Mathematics *December 2019*
- Candidate for a Ph.D. of Mathematics *January 2020 - present*
- GPA: 3.98/4.00
- **Dean's List** in every semester

Hudson Valley Community College, TROY, NY

- Summer Program *May 2018 – June 2018*
- GPA: 4.0/4.0
- Courses: PROG & LOGIC II: DATA, STRUCTURE/OBJ ORIENTED DESIGN W/JAVA

RELEVANT COURSEWORK IN COLLEGE

- Computational Optimization
- Numerical Computing
- Probability
- Intro to Operations Research
- Intro to Data Math

RESEARCH INTERESTS

- Operations Research and Data Science
- Scientific and Numerical Analysis
- Environmental Modeling

PROJECTS

Mortality Minder, RPI **(Supervised by Dr. Bennett of Rensselaer IDEA)** *July 2019 - September 2019*

- Imputed the missing Mortality rate and social determinants
- Utilized machine learning algorithms to find the most important social determinants related to different causes of mortality
- Developed website to visualize the data and design the User Interface

Driving on Electric Vehicles, MCM **(Supervised by Prof. P. Kramer)** *January 2018*

- Analyzed the growth pattern of Tesla in urban and rural areas, and connect it to different local factors
- Built a simulation model to simulate the Tesla's energy use and distributions of charging stations
- Built an evaluation model to rate the performance of each design related to its cost and efficiency.
- Connected our models to the real-life cases and take specific regions as examples

Auto Life-Saver (Making plans for Drones to Disaster Relief) , MCM **(Supervised by Prof. P. Kramer)** *February 2019*

- Identified 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
- Designed the packing configuration of drones in each ISO cargo container and set of medical packages in each drone Cargo, which will meet the requirements of medical packages in different delivery locations after Puerto Rico hurricane
- Provided 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

HONORS

Successful Participant, Modeling Contest in Mathematics *2019*
Honorable Mention, Modeling Contest in Mathematics *2018*

TECHNICAL SKILLS

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