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XIANGYUE WANG

I DESIGN DATA-DRIVEN CLIMATE SOLUTIONS.

RELEVANT STUDIES

Mathematics and Computer Science

Machine Learning (**Python**) | Big Data (**Spark, Hadoop, Map-reduce, Dask, SQL**) | Causal Inference (**R, Stata**) | Responsible Data Science (**Python, Fairness, Differential Privacy**) | Time Series and Statistical Arbitrage (**Python**) | Linear Algebra | Quantum Computing (**Qiskit**) | Ordinary and Partial Differential Equations

Physics

Thermal Physics | Greenhouse Effect | Quantum Mechanics | Electricity & Magnetism | Classical Mechanics | Computer-based Experimentation

Google Data Analytics Professional Certificate

- Hands-on experience with data cleaning, data visualization, project management, and stakeholder communication.
- Transform complex data into actionable insights through a solid understanding of databases and fluency in **SQL, Google Sheets, Excel, Tableau**, and **R**.

COMMUNITY

Rutgers University Senate | Spring 2019 : Spring 2021

Undergraduate Senator of the School of Arts and Science

- Develop university-wide solutions to address the mental health crisis by surveying the Health and Wellness centers throughout Rutgers University.

The Dream Project | Spring 2018 : Summer 2018

Biker - Fundraiser

- Bicycle from New Jersey to Florida to fundraise for the homeless youth shelter, Visions and Pathways.
- Volunteer at homeless shelters along the East Coast.
- Spread awareness of the economic-racial segregation in America today.

EDUCATION

New York University - Center for Data Science | 2021 : 2023 (in progress)

- Masters in Data Science

Rutgers University - School of Arts and Science Honors Program | 2017 : 2021

- Bachelors of Science in Physics (Cum Laude)
- Bachelors of Arts in Mathematics
- Minor in Philosophy
- Thesis: "The Application of the Jensen Wake Model on Single Wake"
- GPA: 3.6
- Deans List | Spring 2021, Fall 2020, Spring 2020, Fall 2019, Fall 2018, Fall 2017

PROFESSIONAL EXPERIENCE

Stern Center for Sustainable Business | New York University | Fall 2021 : Present

Project Lead

- Connect carbon emission data to a finance map of NYC's one million largest buildings, which account for 70 percent of the City's GHG emissions using **PostgreSQL** and **Python**.
- Reveal the collective carbon footprint and energy efficiency of NYC building portfolios belonging to major banks and institutions in a **Tableau** data visualization.
- Facilitate plans to urge major banks to sponsor energy efficiency retrofits and decarbonize NYC buildings in collaboration with groups of Stern business students.
- Supervisor: Marianna Koval

International Arctic Research Center | University of Alaska, Fairbanks | Summer 2021

Data Scientist

- Forecast the likelihood of cold air outbreaks globally due to climate change by cleaning and analyzing climate data of the past seven decades using **MATLAB** and **Python**.
- Visualize insights and communicate the potential impact on power systems and infrastructures with stakeholders.
- Principal Investigator: Vladimir Alexeev

(This research is funded by NSF through the REU program.)

Renewables' and Industrial Analytics (RIA) | Rutgers University, New Brunswick | Spring 2020 : Spring 2021

Data Scientist

- Improve the accuracy and efficiency of real-time wind power forecast by discovering wake loss parameters 80% more accurate than the industry standard after cleaning and analyzing one year of wind data in **R Studio** and **Python**.
- Visualize data and insights using the R package **Plotly**.
- Principal Investigator: Ahmed Ezzat