WANMENG LIU

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EDUCATION

GEORGIA INSTITUTE OF TECHNOLOGY, Atlanta, Georgia

Jan. 2021 - Expected Graduation: May 2022

Master of Science, Health Systems

Relevant courses: Regression Analysis, Computational Statistics, Simulation, Deterministic Optimization

THE GEORGE WASHINGTON UNIVERSITY, Washington, D.C.

Sept. 2017 - Dec. 2019

Bachelor of Arts, International Affairs (Honors: cum laude)

UNIVERSITY OF CAMBRIDGE, Cambridge, United Kingdom

July 2017

Summer Program, Contemporary Art and European History

PARSONS SCHOOL OF DESIGN, NEW SCHOOL, New York, New York

June 2016

Summer Program, Graphic Design

PROFESSIONAL EXPERIENCE

GEORGIA INSTITUTE OF TECHNOLOGY, Atlanta, Georgia

July 2021 - August 2021

Graduate Research Assistant, ISyE

- Analyzed state of Georgia Covid-19 data from March 2020 to June 2021
- Determined associations between socioeconomic factors and covid-19 cases, deaths, and hospitalizations with regression models and non-parametric hypothesis tests
- Determined correlations between political factors and vaccination rates in each county with one-way ANOVA
- Generated interactive maps to identify Covid-19 hotspots in Georgia with Plotly
- Created temporal plots to compare Covid-19 cases, deaths, and hospitalizations in each county with Python
- Produced scientific reports and presentations to communicate results of statistical modeling and their policy implications with audience from both technical and non-technical backgrounds

NATIONAL LGBT CHAMBER OF COMMERCE (NGLCC), Washington, D.C.

June 2018 - July 2018

Intern, NGLCC Global

- Produced social media content, newsletters, invitation letters for donors, and blog posts
- Recommended over ten grant programs to fund NGLCC Global projects
- Delivered presentations on virtual reality, employee training, and social inclusion

PROJECT EXPERIENCE

GOOGLE CUSTOMER REVENUE PREDICTION

language: Python

- Preprocessed the Google customer data (obtained from Kaggle) including data cleaning and Principal Component Analysis
- Applied regression models, and tree-based models (random forest and gradient boosting) to predict the future transaction revenue and tuned parameters with cross-validation
- Visualized the performance of different machine learning models for model selection

STROKE PREDICTION language: Python, R

- Analyzed a healthcare dataset (obtained from Kaggle) with 10 clinical features
- Built a logistic regression model with AIC model selection criterion to predict the probability of a patient having a stroke

SKILLS