# Ziyin Zheng

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#### EDUCATION

## University of North Carolina at Chapel Hill

June 2023 – Present

Master of Information Science

University of Hertfordshire

Sept 2020 - June 2023 Current GPA:4.28/5.0 (First-class)

Bachelor of Art Business Administration(information system pathway)

Imperial College London

July 2022

Summer School: Business Analytics

Current GPA: 75.63 (First-class)

Relevant Coursework: Programming, Statistical Modelling, Foundations of Optimization, Databases,

Operating System, Algorithms and Analysis, Applied Machine Learning.

Awards: First-class Scholarship, Provincial Governmental Scholarship

## Experience

#### Launchmetrics

May 2022 – May 2023 (Remote)

- Supported the Data Service team in collecting, preprocessing, and analyzing trace data by leveraging models such as Difference-and-Difference, resulting in 0.01 increased CTR.
- Conducted regression analysis and extrapolated marketing data based on RMF (i.e., Recency, Frequency, and Monetary) using Python, resulting in 0.01 of Gross Merchandise Value boost.
- Prepared 3+ reports on the supply chain of target corporations based on models like SCOR, leading to the propose of an allocation solution that greatly reduced the sold-out frequency.
- Solved problems relating to asynchronous tasks.

#### Research Volunteer Assistant

August 2022 (Georgia Tech)

- Use pandas, sql, and python to collect and clean census tract level data of solar suitability, solar adoption, and other controlled corvariates.
- Derive an EM algorithm for training a mixture of negative binomial regressions model.
- Numerically implement the model on the dataset with hyparaemter fine-tuning on overdispersion and visualization.

# Project

#### Blogging website

May 2023 - Oct 2023

- Developed a full-stack e-commerce website using MERN stack.
- Created a task management app with Vue.js for the front-end and Node.js for the back-end.
- Implemented user registration and login systems, Implemented user authentication.
- Implemented user profiles, post creation, and commenting features.
- Used PostgreSQL to store user and post data.

# Prediction Heart Disease with Machine Learning

Oct 2023 – Dec 2023

- Executed comprehensive data preprocessing, including outlier removal and handling missing values, leading to a refined dataset for modeling.
- Built and evaluated multiple models: Logistic Regression (0.84 accuracy), SVM (0.89 accuracy), and an Ensemble model combining both with a Random Forest Classifier (0.81 accuracy).
- Fine-tuned models to achieve high precision (0.92) and recall (0.95) rates, optimizing the balance between false positives and negatives.
- Developed a model with an ensemble approach, leading to improved predictive performance and insights into the significance of machine learning in healthcare diagnostics.

# SKILLS

Languages: Java, Python, R, AMPL, SQL, Hadoop, Sparks, JavaScript/TypeScript, HTML/CSS, LATEX Tools: Git/GitHub, Unix Shell, Node.js, Webpack, VS Code, IDEA, MATLAB