# Yang Han

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### **EDUCATION**

University of Michigan

Sep 2023 - May 2025

Master of Applied Statistics GPA: 3.7

Ann Arbor, US

Relevant Courses: Statistical Modelling: Regression, Statistical Modelling: Multivariate, Data Science & Analytics Using Python, Computational Methods & Tools in Statistics(R, SQL, etc.), Bayesian Modeling & Computation

**University College London** 

Sep 2019 - Jul 2022

BSc Statistics, Economics and Finance GPA: 3.7

London, UK

Relevant Courses: Probability & Inference, Statistical Inference, Linear Models & The Analysis of Variance, Forecasting using Time Series Analysis, Applied Statistics: Stochastic Process

#### PROFESSIONAL EXPERIENCE

**Ford Motor Company** 

May 2024 - Jul 2024

Intern: Data Scientist

Dearborn, US

- Utilized GCP to write and execute data extraction queries, enhancing data accessibility for analysis.
- Analyzed vehicle battery drain issues using machine learning algorithms in **Python**, leading to a projected 20% reduction in battery warranty expenses and an improvement in customer satisfaction.
- Developed a **Python** script utilizing clustering algorithms such as **K-Means**, **DBSCAN**, and deep learning **Autoencoders** to automate the analysis process, increasing efficiency and scalability of the project.
- Attended the Hackathon with the team, aiming to set up a more efficient method for the battery triage project. Presented the presentation individually and successfully helped the team achieving the aim.

AD Services Co.

Jan 2023 - Jun 2023

**Data Analyzing Consultant** 

Birmingham, UK

- Utilized **Tableau** to create dynamic dashboards for social media metrics, enabling data-driven decision-making and significantly increasing company visibility, resulting in more potential customer engagement for the team.
- Conducted an analysis of client behavior by developing reports based on limited social media metrics from up to 30 student organizations, successfully developed cooperation relations, achieving a 50% increase in social media following.
- Generated daily dashboards to monitor the rental market availability and consumer preference metrics, helping the team conduct consumer analytics, leading to a 40% increase in GMV in the leasing business during the off-season.

## Beijing Xiaomi Technology Co.

May 2021 - Sep 2021

Intern: Data Analyst

Beijing, China

- Automated manual reporting using **Excel** index & match functions, resulting in a 50% reduction in weekly log writing time.
- Performed ETL operation, extracted metrics related to user growth, carried out the cleansing process, and loaded the data to the cluster by writing SQL queries and using Python, helping the team with the pre-analysis preparations.
- Performed user growth funnel analysis utilizing **Logistic Regression** in **Python** to pinpoint high-conversion touchpoints, delivering actionable data-driven recommendations to the team, improving the new user conversion rate by 15%.
- Detected abnormal click PV fluctuations at a particular node, found a scam by a click farm after investigating the data, and reported it promptly, preventing the team from losing a budget of 30,000 CNY.
- Designed and implemented **A/B testing** to optimize interface interaction, resulting in a 28% reduction in user churn to the second-level page and an 80% increase in banner exposure PV.

### **PROJECT EXPERIENCE**

## Trends in the Prevalence of Major Chronic Diseases Across the U.S. Over Time I Python

Apr 2024 - May 2024

Machine Learning Engineering

Ann Arbor, US

- Conducted data preprocessing, including data cleaning and exploratory data analysis, using Pandas and Numpy to
  ensure data quality and uncover key insights from the data.
- Performed feature engineering tasks such as feature interaction generation, normalization, and label encoding using Scikit-learn preprocessing to enhance model performance and data representation.
- Applied classification techniques such as Logistic Regression, Support Vector Machines, and XGBoosting to develop predictive models for common chronic diseases in the U.S.
- Performed hyperparameter tuning using grid search and applied K-fold cross-validation to optimize model performance, resulting in a 35% improvement in predicting accuracy.
- Generated interactive visualizations using **Plotly** and **Matplotlib** and compiled a comprehensive report. Delivered a successful presentation to non-technical audiences, receiving positive feedback for clarity and engagement.

### **SKILLS**

- Programming: Python(Numpy, Pandas, Matplotlib, Sci-kit learn, etc.), Spark, TensorFlow SQL, R(dplyr, etc.), SAS
- Tools: Microsoft Office, Tableau, AWS, GCP, ETL Process, A/B Testing, Statistical Modelling, ML Algorithms, Gen Al Prompting