## Yihui Fan

## Data Scientist | Business Analytics & Consumer Behaviours

Postgraduate training in both machine learning and social science, together with 6 years of work experience in data science, behavioural science and management consulting equipped me with a unique skill set for delivering user-focused data insights.

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#### **WORK EXPERIENCE**

## **Senior Data Scientist** Decision Technology

10/2014 – Present London

Consulting company specialising in understanding and predicting customer behaviours with experimental psychology, cognitive science and statistics

#### Achievements/Tasks

- Lifted customer conversion rate by 17% by building statistical models and mining clients' big data sets to identify enablers and blockers for product consideration
- Accurately forecast sales for clients by deploying ARIMA and neural network based time series models accounting for marketing and promotion activities
- Boosted customer lifetime value for clients by optimising product offerings and improving experience through A/B tests and randomised control trials
- Slashed data model deployment time from days to hours by implementing a DevOps framework leveraging Docker and container orchestration
- Designed and built dashboards that track clients' key metrics during COVID-19 and facilitate post-lockdown strategic business planning
- Effectively managed a team of junior data scientists and worked closely with other business functions on multiple concurrent projects
- Translated data to actionable insights and recommendations and communicated results to (non)technical stakeholders across different functions

#### **EDUCATION**

## MSc Advanced Computing Technologies (Machine Learning)

Birkbeck, University of London

09/2016 - 09/2018

Distinction

Selected Courses

- Big Data Analytics
- Parallel Computing and Distributed Systems
- Machine Learning
- Data Mining & Warehousing

## MSc Sociology University of Oxford

09/2013 - 09/2014

Distinction

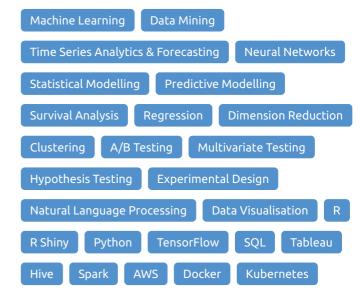
Selected Courses

Statistics

Experimental Design

# **BA Linguistics and Sociology** University of Manchester

### **SKILLS**



### **PROJECTS**

Data Science blog: databentobox.com (10/2016 − Present) ☑

- databentobox.com is a blog where I showcase my personal data science projects and share thoughts on statistics and programming
- Blog articles are frequently re-posted by R-bloggers and KDnuggets and have gained traffic in the data science community
- Specifically, the recent project Simulating Coronavirus Outbreak with Origin-Destination Matrix and SEIR Model attracted 20k views

MSc Machine Learning Project: Tackling Toxic Comments Using Convolution and Recurrent Neural Networks (06/2018 – 09/2018)

- Going beyond standard sentiment analysis, the goal of this project is to build an automated tool to identify online toxic comments
- Neural network based classification models (bidirectional GRU-CNN) with pre-trained word embedding were built
- The final model achieved state-of-the-art classification results and the MSc project was awarded distinction

MSc Sociology Thesis: Gender Equity and Women's Fertility Intention in European Countries (06/2014 – 09/2014)

- This thesis provides an empirical test of gendered fertility theory by examining whether low gender equity at home lowers women's fertility intentions in 31 European countries
- Using multilevel logistic regressions, together with the data from the second and the fifth round of European Social Survey, the MSc thesis generated unique insights and was awarded distinction

#### LANGUAGES

English Native or Bilingual Proficiency Mandarin Chinese
Native or Bilingual Proficiency