

Yujian He

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【 Education Background 】

09/2018 – 03/2022

The University of California, San Diego

- ◆ Double Majors: Data Science | Management Science (Total GPA: 3.7/4.0 | Expected Degrees: Bachelor of Science)
- ◆ Academic Honors: Provost Honors (Fall 2019, Winter 2020, Spring 2020, Fall 2020, Winter 2021, Spring 2021)
Honors with Distinction in the major of Management Science

【 Technical Skills 】

- ◆ Programming: Python, SQL, NoSQL, Java, JavaScript, CSS, HTML, Matlab, R, Stata, JMP
- ◆ Data Science Practice: Machine Learning, Deep Learning, Statistical Modeling, Hypothesis Testing, Relational Data Modeling and Schema Design, Data Cleaning and Data Mining, Experiment Design, Data Visualization, Web Development, Parallel Query Processing, Amazon Web Service (AWS)
- ◆ Data Science Package/Framework: NumPy, Pandas, TensorFlow, Scikit-learning, Matplotlib, BeautifulSoup, SciPy, TensorFlow, PyTorch, PySpark, MapReduce, D3.js, Hadoop, Tableau

【 Employment Experience 】

03/2021 – Present

Hey Social Good, San Diego, California

Data Science Team Intern

- ◆ Performing web scraping in Python to comply supply chain resources and company data for environmental-friendly analysis.
- ◆ Determining the optimal procedural areas to achieve sustainable business planning in targeted marketing campaigns.
- ◆ Engineering an algorithm to automate the environmental assessment on 300+ companies to improve performance efficiency

12/2021 – Present

UC San Diego, San Diego, California

Teaching Assistant

- ◆ Managing student concerns with professionalism and resolving students' confusion of course material.
- ◆ Grading students' homework, quizzes, and exams in ECON120A, ECON120B, and DSC40A.
- ◆ Leading discussions and interpreting the key points like probability, hypothesis testing, and mathematical modeling.

03/2021 – 06/2021

Qualcomm Institute, UCSD Division of Calit2, San Diego, California

Research Intern

- ◆ Integrated the HVAC data utilization and information from FIMS Metasys and Johnson Control System to solve the optimization problem between energy saving and providing enough air circulation.
- ◆ Visualized HVAC systems and architecture to simulate movement of air particles with CO2 emission devices to reduce the indoor exposure to Aerosols carrying coronavirus.
- ◆ Applied various machine learning techniques using Python to build a classification to identify the human and detect abnormality using Wi-Fi signals and keycard access data and obtain 80%+ accuracy.
- ◆ Employed an advanced digital twin platform to facilitate and visualize human activity within the Qualcomm Institute.

03/2021 – 06/2021

California Institute for Telecommunications and Information Technology

Machine Learning Intern

- ◆ Modeled people's walk path in the digital twin platform via reinforcement learning and AI reward system.
- ◆ Facilitated to manage the volume and movement of visitors to locate their desired books by predicting their walk paths.

Resume for Application

【Project Experience at UC San Diego】

05/2021 – 06/2021

Autonomous Vehicle Motion Forecasting

- ◆ Built deep learning models to reliably predict the movement of traffic agents around the autonomous vehicles.
- ◆ Implemented auto-regression linear models, LSTM, and encoder-decoder model in PyTorch and obtained MSE <2.5.

11/2020 – 12/2020

Steam User Play Prediction

- ◆ Engineered a model using user and game data from gaming platform Steam by implementing natural language processing to analyze users' review text and predict game players' preferred game choices that he/she never played before.
- ◆ obtained 76.9%+ accuracy and ranked top 15% in Recommender System Kaggle competition among 401 competitors.

11/2020 – 12/2020

Steam User Category Prediction

- ◆ Engineered a recommender model to predict the category of the game on the gaming platform Steam by implementing Jaccard Similarity, Cosine Similarity, and neural networks.
- ◆ obtained 71%+ accuracy and ranked top 15% in Recommender System Play Prediction competition among 673 competitors.

10/2020 – 12/2020

Recommender System Project - Clothing Fit Classification

- ◆ Explored the dataset on renttherunway.com. and performed data cleaning, imputation, and exploratory analysis.
- ◆ Engineered the model to accurately classify 81% of the fitting situation and improved user experience by implementing sentiment analysis and neural network

10/2020 – 12/2020

Data Science in Practice Project - Political Preference in Covid-19

- ◆ Collected the global COVID-19 data, performed data exploratory analysis, and estimated the correlation between the increasing infection rate and political preference of each county in the U.S.
- ◆ Engineered a model to predict the speed of spreading virus to cities' political preference and obtained 67%+ accuracy.

03/2020 – 06/2020

California Climate Change Visualization

- ◆ Visualized and analyzed the correlation between California average temperature and wildfires for the past 20 years
- ◆ Estimated the climate change impact via interactive graphs, built a website using HTML, CSS, JS, and designed user-centered charts that help easily understand the severity of global warming.

01/2020 – 03/2020

Snapchat Political Advertisements Data Analysis

- ◆ Explored and performed exploratory data analysis the political ads data from Snapchat between 2018 and 2019, discovered the common trend and specialty of political ads in Snapchat.
- ◆ Engineered a model to evaluate the fairness of the data, measured the audience impression of the political advertisements, and predicted the number of user impressions for advertisers, obtained RSME score 0.298 in average.

【Extracurricular Experience】

01/2019 – Present

Chinese Business Society, UC San Diego

Minister of Event Coordinate Department

- ◆ Advancing the initiatives of the department, composing and executing event proposals, monitoring the event's progress, raising public awareness of CBS, providing career planning guidance and resources for those who are interested in business.
- ◆ Seamlessly planned and executed both professional and social events such as Who is Still Standing, managed budgets for events with up to 300+ attendees