LIN Zeyin

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Education

The Hong Kong University of Science and Technology — Hong Kong
Master of Science in Data-Driven Modeling, GPA: 4.30/4.30, rank 1st — *Sep. 2021 – Present*

City University of Hong Kong — Hong Kong
Master of Science in Data Science, GPA: 3.71/4.30, Distinction Master's Degree — *Aug. 2020 – Jul. 2021*

Sun Yat-sen University — Guangzhou, China
Bachelor of Engineering in Telecommunication Engineering, GPA: 3.1/4.0 — *Sep. 2016 – Jun. 2020*

Project Experience

Semantic Analysis of Online Chinese Public Opinion — Oct. 2018 – May 2020
Sun Yat-sen University — *Guangzhou, China*

- Wrote crawler scripts based on different text platforms (Weibo, Zhihu) to collect online public opinion.
- Performed text preprocessing on the collected text, including text cleaning, Chinese word segmentation, stop words filtering and data visualization.
- Applied and compared different models and algorithms from three aspects: characters, chapters, and themes. Found hot words through word extraction based on TF-IDF, used LDA model to achieve the topic modeling of large-scale unclassified texts, applied NB and SVM model to text classification and sentiment tendency analysis.

A Web Application for Virtual Try-on Clothes — Jun. 2018 - Mar. 2019
Sun Yat-sen University — *Guangzhou, China*

- This project was a group project for participating Provincial Training Program of Innovation and Entrepreneurship for Undergraduates.
- Recognized the facial feature points from the front face selfie provided by a user, then located and reconstructed the user's real five senses on the virtual model face. User can choose to try on virtual clothes in preference, and clothes will cover the specific model automatically.
- Finally developed a virtual fitting room demo based on the webpage and won the second prize in the school's project assessment.
- I was the initiator and general person in charge of the project, responsible for the overall framework design and progress management. I mainly wrote Python code for face integration.

Airbnb's Business Data Analysis and Visualization of Hong Kong — Oct. 2020 - Dec. 2020
City University of Hong Kong — *Hong Kong*

- To improve the quality of service of Airbnb Hong Kong and explore the impact of the epidemic on the short-term rental industry, we collected rental data and host information of Airbnb Hong Kong in the past 4 years.
- I was responsible for the framework design of the project, as well as the landlord portrait analysis, text NLP analysis and geographic visualization based on Tableau.
- By using dynamic maps to integrate and display the distribution of Airbnb Hong Kong's listings and data changes in the past 4 years, achieved some instructive conclusions.

Design and Implementation of a Multifunctional Game Platform — Oct. 2020 - Dec. 2020
City University of Hong Kong — *Hong Kong*

- Project designed and developed a comprehensive game platform similar to Steam. The platform has both user module and enterprise module. Users can browse, buy, rate and comment games, companies can publish their new games and conduct business analysis based on indicators such as collections and sales.
- I drafted the framework and main functions of the platform, and finished the development of the back-end database based on MySql, including the establishment of database modules and related sql query for sorting functions.
- Participated in web development based on Flask.
- Made the demonstration of our project in finals.

Gobang AI Implementation based on Monte Carlo Tree Search — Sep. 2021 - Dec. 2021
The Hong Kong University of Science and Technology — *Hong Kong*

- This project implemented a Gobang game with GUI, which enables two players to play against each other, and has a built-in game AI based on Monte Carlo tree search.
- Completed the four modules of Monte Carlo tree search: selection, expansion, simulation, and backpropagation, pruned the roll out policy, and won the third prize in the class Gobang AI competition.

Internship

Remote Collaboration with Tongdun Co. in Bond Default Risk Prediction Oct. 2021 - Feb. 2022

The Hong Kong University of Science and Technology *Hong Kong*

- Inspired by Tongdun Co. and its prestigious client, a top bank in China, aiming to derive key fa2ctors and regularity throughout the lifecycle of default entities in China mainland's second market.
- Working with two staffs from Tongdun Co., try various of methods to exploit and predict the risk of a company that would default in the recent future. Methods include: deep learning, machine learning, classic statistics methods, NLP feature engineering, etc.
- The feature engineering is realized from two directions: statistics and NLP. The statistical indicators of time slices are used to quantify public opinion, and the sample size is expanded by sliding time window. Based on Bert model, the clustering of news public opinion events is realized semantically, which improves the overfitting caused by large amount of news talking about the same event. After training through ensemble models, we achieve a 85% accuracy rate and 90% AUC in the test dataset, which initially meets our client's requirements.

Skills and Others

- Technical Skills: Python, Matlab, Latex, Tableau, SQL
- Languages: Mandarin (native speaker), English (capable to write English papers)
- With a multi-disciplinary background, have good performance in core courses: Scientific Programming and Visualization(A+), Stochastic Processes and Applications(A+), Machine Learning(A+), Algorithm and Object-Oriented Programming for Modeling(A+), etc.
- Dedicated and self-driven, strong self-learning ability, obtained the Master's degree of Science with Distinction at CityU, obtained 5 A+ marks in the 2021 fall term of HKUST.
- Has multiple project experiences, has huge enthusiasm for the combination of product design and data technology, has a certain ability of thinking divergence, like analyzing and mining problems from a different perspective.