Huixin HAN

(852) 5177-7371 | hanhx0229@gmail.com

EDUCATION

Sun Yat-sen University (SYSU) Guangzhou, China
Bachelor of Management in Management Science, GPA 3.4/4.0 09/18-06/22

- Coursework: Undergraduate Thesis (A), Service Operations Management (90), Big Data Management (88), Mathematics (87), Research Methods in Management Science (87), Data Analysis (86)
- Standardized Test Score: GRE 330/340

RESEARCH EXPERIENCE

Hong Kong University of Science and Technology (HKUST) Hong Kong, China
Research Assistant, Supervised by Professor Kai Lung HUI, Department of ISOM 06/23-present

- Contributed significantly to the Cybersecurity Index project, which aims to conceptualize cybersecurity status, construct a cybersecurity nomological model, provide a new measure of cybersecurity considering the influence of social media, and examine the correlation between cybersecurity level and key macroeconomic metrics.
- Utilized MacBERT model to classify over 1,300,000 social media posts from multiple sources and established keyword dictionaries for identify various cybercrime incidents.
- Conducted experiments using multiple time-series models and provided preliminary evidence of a strong correlation and promising predictability between social media variables and real-world cybercrime data.

Chinese University of Hong Kong, Shenzhen (CUHKSZ) Shenzhen, China
Research Assistant, Supervised by Professor Liu MING, Department of ISOM 08/22-06/23

- Responsible for the algorithmic component of Research Project Artificial Intelligence in Livestock: Deep Learning Based Technical Solutions on Detecting Cattle Behaviors and Diseases.
- Developed a threshold-based ensemble model combining logistic regression and random forest algorithms to predict the health status of cattle with an AUC of 92%.
- Applied for two national patents successfully for livestock health monitoring systems as an inventor.
- Assisted in teaching courses Operations Management and Data Analytics and Decision Making.

Shenzhen Institute of Data Economy (SIDE) Shenzhen, China
Part-time Research Assistant, The Agricultural and Livestock Digital Economy Research Center 06/23-present

- Constructed a new method for early detection of cattle estrus status by integrating rules-based and machine learning algorithms, achieving recall and precision rates of 86% and 85%, respectively.
- Applied for two national patents successfully for livestock estrus monitoring systems as an inventor.

THESIS AND COURSE PROJECTS

The Impact of Online Reputation on Sales of New Energy Vehicles: Evidence from Xiaohongshu 06/22
Undergraduate Thesis, Supervised by Professor Jun QI, Department of Management Science, SYSU

- Solidified expertise in unstructured data processing by crawling and processing over 10,000 notes on Xiaohongshu.
- Utilized semantic-based methods to extract feature-sentiment pairs, conducted sentiment analysis using Naive Bayes, and weighted the sentiment results of different features with corresponding TF-IDF values to obtain the online reputation score of different aspects.
- Built a multiple regression model to investigate the impact of online reputation on product sales for different features and examined the moderating effect of price.

Forecast of Credit Default Risk: Based on the Home Credit Default Risk Dataset 01/21
Course Project, Data Mining and Machine Learning

- Enhanced the prediction results of ensemble algorithms including Random Forest, GBM and Stacking, achieving a top 10% ranking on Kaggle's leaderboard.

SKILLS AND ADDITIONAL INFORMATION

- Programming & Software: Python, R, STATA, Tableau, MATLAB
- Languages: English (fluent); Chinese (native)
- Others: National First-level Swimmer Certificate