SHUO XU

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EDUCATION

University of Edinburgh **Edinburgh, UK**
School of Mathematics *September 2019 - Present*
Master of Science; Major in **Statistics with Data Science**
- Major Courses: Statistical Programming(A), Bayesian Data Analysis(A)

Inner Mongolia Normal University **Hohhot, China**
School of Economics *September 2015 - July 2019*
Bachelor of Economics; Major in **Economics** **GPA: 87/100**
- Major Courses: Microeconomics (94), Marketing (91), Statistics (91), Linear algebra (93)
- First-Class Academic Scholarship

Computer and Information Engineering College *September 2015 - July 2019*
Second Bachelor of Engineering; Double major in **Computer Science** **GPA: 88/100**
- Major Courses: Network Engineering: An Overview (92.6), Fundamentals of Programming (91)

Course Study at Hong Kong University *August 2018*
- 1-week program organized by the China Affair Office of HKU
- Representative Courses: Leadership in the Knowledge Economy, Marketing Research and Strategy

Overseas Study Tour *February 2017*
- 2-week program studied in the University of Pennsylvania/ Columbia University/ Yale University
- Major Courses: Financial Statistics, Corporate Finance, Accounting, Monetary and Banking

PUBLICATIONS

[1] Zhang Xin, Xu Shuo, **"Research on Image Processing Technology of Computer Vision Algorithm"**, *2020 International Conference on Computer Vision, Image and Deep Learning (CVIDL2020)*, May 2020

[2] Zhang Zichen, Xu Shuo, Hawking Yan, **"Preliminary Study on Application of Artificial Intelligence Technology in Electrical Automation Control"**, *2020 International Conference on Computer Information and Big Data Applications(CIBDA2020)*, April 2020

[3] Ma Chao, Yi Xianyong, Yu Chenglong, Xu Shuo, Li linyi, **"Research on Image Classification Method Based on DCNN"**, *2020 International Conference on Computer Engineering and Application(ICCEA2020)*, March 2020

PROJECTS

Categorical Feature Encoding Challenge II (Kaggle 34/1161)
March 2020 - April 2020

- Used Pandas, Matplotlib to do data cleaning and removed abnormal rows
- Conducted exploratory data analysis (EDA) on training data and created some features like combined features, frequency features, statistical features
- Designed and tested blending and stacking method for model fusion based on XGBoost, LightGbm models to get final result

Exploring the quality and physicochemical characteristics of Portuguese Vinho Verde wine
April 2020 - May 2020

- Used Imbalanced-Learn to deal with data imbalance problem
- Conducted exploratory data analysis (EDA) on training data and use one-hot encoding processing in sequence classification problems
- Designed and tested Voting Classifier models blending RF, Gradient Boosting Classifier and Extremely Randomized Trees models to improve the prediction accuracy of the model

RESEARCH EXPERIENCE

Research on Image Processing Technology of Computer Vision Algorithm
Advisor: Prof. Yunli Yang *November 2019 - April 2020*

- Designed a system for the computer vision display used by an intelligent interactive true three-dimensional display device, which uses information analysis
- Explored image distortion correction algorithms by using computer vision algorithms at the current stage

Comparative analysis of machine learning methods for measuring equity risk premiums
Advisor: Prof. Nan Jiang *November 2017 - June 2019*

- Conducted analysis of machine learning methods including generalized linear models, dimension reduction techniques, boosted regression trees, and random forest
- Proposed Neural networks were the best performing nonlinear method and predictor overall

Research on the application of machine learning in plant classification
Advisor: Prof. Guiquan Tian *November 2015 - July 2016*

- Researched on Machine Learning techniques applied to the analysis of plant dataset using Keras and Tensorflow
- Processed the plants data features through Cross-Validation Approach
- Classified the plant samples using Machine Learning's models (CNN, SVM)

SKILLS LANGUAGE PROFICIENCY

Programming Languages	C/C++, Python, R, MATLAB, SPSS, Eviews, Stata, PHP, HTML
Software & Tools	MS Office, Latex, Arena (Simulation Tool)
Languages	English, Mandarin Chinese

WORK EXPERIENCE

Beijing Kuxuan Network Co., Ltd., China June 2017 - August 2017
Product Technology Department Intern / Data Analysis Team

· Built predictive machine-learning models with Python and compiled data analysis reports based on the data and model prediction result.

Guangdong Jinghai Asset Management Co., Ltd., China January 2016 - February 2016
Research and Development Department/ Intern

· Analysed the predictive accuracy of machine learning methods in measuring risk premiums of the aggregate market and individual stocks and predict the performance of stocks and economic gains using machine learning forecasts.