# Ye Tao

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### **EDUCATION**

### University of California, Davis

Davis, CA

B.S. Applied Statistics, 3.57/4.0; B.A. Economics in Data Analysis 3.61/4.0

Expected Dec 2020

 Relevant Course: Econometric, Money and Banking, Regression Analysis, Time Series Analysis, Applied Linear Algebra, Probability Theory, Financial Economics, Statistical Data Science

### PROGRAMMING SKILLS

Python (Pandas, Numpy, Scikit-learn, Tensorflow, PyTorch), R (Tidyverse, ggplot2), SQL(MySQL), Tableau

#### WORKING EXPERIENCE

## **PricewaterhouseCoopers**

Shanghai, China

Data Science Intern

Jun 2019 - Sep 2019

- Modelling with Python based on word embedding and transfer learning to analyze customer feedback sentiment; performed data tidying on 40K+ visa customer comment data; achieved 71% in model accuracy.
- Build extractive text summarizer using NLP techniques, such as TD-IDF, TextRank in python.
- Conducted fraud detection for 300K+ credit card transactions by building machine learning models including Logistic Regression; increased accuracy by 23% through optimization.
- Initialized reorganization and migration of client's data into SQL database; matched remained data in python by measuring string similarity (Cosine & Jaccard similarity); further performed features extraction and modelling with naïve Bayes algorithm.

**Entropy Capital LTD** 

Shanghai, China

Intern

Jun 2018 – Aug 2018

- Forecasted future stock price by ARIMA model. Implemented factor selection through Backward Selection, Forward Selection with AICc, BIC criteria.
- Computed a trading strategy based on moving average and weighted moving average model to predict returns of stock in R.

**University of California** 

Davis, CA

Student Researcher

July 2017 – Aug 2017

- Collaborated with professors and studied several topics including population, poverty; calculated Gini index for measuring wealth distribution in ancient Japanese society.
- Created SQL database of family trees, as well as writing comprehensive memos and updated reports.
- Analyzed the effect of wealth inequality in ancient Japanese society through hypothesis testing in R.

### **PROJECTS**

### **Credit Card Fraud Detection**

Oct 2019 – Dec 2019

- Performed under-sampling and over-sampling on imbalanced credit card transactions data.
- Constructed classification models for fraud detection using various methods tree-based models (XGBoost, Random Forest, Decision Tree) and SVM.
- Presented model performance with data visualization techniques(ggplot2) to non-technique audiences.

### **Global Temperature Prediction**

Jan 2018 – Feb 2018

- Researched on dependent variable of Temperature, with related factors. Performed a complete analysis with linear, non-linear regression, box transformation, residual analysis etc.
- Model selection with forward inclusion and stepwise backward elimination with BIC and AIC criteria.

### INTEREST AND EXTRACURRICUALR ACTIVITIES

- Languages: Chinese, English, Japanese
- Top50 Go semi-professional player with 4 Dan