CHEN QIAN

399 Crocker Lane, One Shields Avenue, Davis, CA 95616
Phone: (+1)5712670414
Email: mrcqian@ucdavis.edu
Homepage: https://chen20191020.github.io/ChenQian

OBJECTIVE

I am actively applying for doctoral programs in Statistics, Data science, and Econ & Stats for Fall 2023.

EDUCATION

University of California, Davis — **Davis, CA**
M.S. Statistics (*Data* Science Track) — *Sep.2021 - Jun.2023*

Complutense University of Madrid — **Madrid, MAD**
B.S. Applied Statistics — *Sep.2016 - Jul.2020*
Advisor: Enrique Gonzalez Aranguena
Thesis: A comparison of Box-Jenkins ARIMA models and Artificial Neural Network models for financial time series.

RESEARCH INTEREST

- Time Series Analysis (Stationary, Non-stationary, Nonlinear, Wavelets)
- Machine Learning(RNN, LSTM, BERT)
- Bootstrapping
- Functional Data Analysis

RESEARCH EXPERIENCE

University of California, Davis — *Davis, CA*
Independent Research — *Jun.2022 - Present*
Supervisor: Xiucai Ding

- Creating '*Sie2nts*' R package for auto-regressive approximations to non-stationary time series with estimation via the method of sieves and a high dimensional test basis on multiplier bootstrap procedure. *(In progress)*
- Provided Daubechies 1-20 and Coiflet 1-5 father wavelet value table and the function to generate wavelet table by Cascade algorithm.

Complutense University of Madrid — *Madrid, MAD*
Thesis Research — *Jan.2020 - Jul.2020*
Supervisor: Enrique Gonzalez Aranguena

- Compared the forecasting ability of ARIMA and 2 layers LSTM models for financial time series in long and short periods (Keras, Statsmodels).*Link*

INDUSTRY EXPERIENCE

Zhongyu Tech (mobile game) — *Wuhan, China*
Data Scientist — *Sep.2020 - May.2021*

- Promoted the company to establish the data center team, formulated data-driven solutions to help the company's product decision-making, and created technology platform to perform data analysis.
- Designed metrics and analyzed experiments to evaluate features for top100(Spring 2021) game "Wheel Offroad 3D"; Improved retention rate by cohort analysis and monetized the fitness of revenue.
- Constructed ETL procedure with API functions provided by SensorTower and Performed EDA about mobile game market.
- Wrote weekly reports and delivered on the dashboard to aid other partners in design and engineering using.
- Optimized features of RFM model and K-means algorithm to create user cohort for "Wheel Offroad 3D".

PROJECTS

Causal study in mobile game industry

- Wrote annual report with content of the seasonality analysis of game market(trough in Feb) and causal study between big events and mobile game downloads (Language: Mandarin).*Link*

Forecasting of COVID-19 endpoints

- Built features for COVID-19 data to predict pandemic endpoints in 3 different countries using Bidirectional LSTM and compared results based on experiment design (Keras, Statsmodels).*Link*

COURSES

University of California, Davis

- **Stats, DS, CS**: Probability Theory (Miles Lopes), Statistical Inference (Can Le), Statistical Methods and Research (Jie Peng, Shizhe Chen), Applied Time Series (Xiucai Ding), Data Web Technologies for Data Analysis (Duncan Temple Lang), Multivariate Data Analysis, Statistical Data Science
- **Planned**: Optimization for Big Data Analytics (Mina Karzand), Applied Statistics (D. Paul), Generalized Linear Models (H. Mueller), Independent Research (Xiucai Ding)

Complutense University of Madrid

- **Stats, Math**: Probability Theory and Stochastic Processes, Statistical Estimation(Inference), Optimization Techniques, Survey Sampling, Design of Experiments, Multidimensional Analysis, Simulation and Queuing Systems, Lineal Linear Prediction Methods, Industrial Applied Statistics, Time Series, Survival Analysis
- **DS, CS**: Programming I & II(C++), Statistical Software I(SAS), Statistical Software II(R), Computational Methods for Mathematics(Matlab), Database Design, Data Cleaning, Data Structures and Algorithms

HONORS

The Honours(The top student in 10 courses at Complutense) *2016-2020*

Top performance(in M.S. Comprehensive Exam at UC Davis) *2022*

SKILLS

programming: Python, R, MySQL, C++, SAS, Matlab
Languages: English, Spanish, Mandarin

Certificates: Machine Learning (Coursera)