Shuhan Chen

Phone: 86-18361258982 Email: hichenshuhan@163.com
Room 102, Unit 3, Building 30, Hanfu Yayuan, Tongshan District, Xuzhou, Jiangsu, China

EDUCATIONAL BACKGROUND

Xi'an Jiaotong-Liverpool University, Taicang Campus, Suzhou, China **09/2021-07/2025**

Data Science and Big Data Technology with Contemporary Entrepreneurialism

- **Grade:** 69.8%
- **Awards:** 2024/25 University Academic Achievement Award University; 2023/24 Academic Excellence Award (top 5 of the grade); Gold Award in the WorldQuant Challenge (Top performer in an international quantitative finance competition, demonstrating advanced skills in financial modeling and algorithmic trading.).

INTERNSHIP EXPERIENCE

Bu'er Live Streaming E-commerce Base (Online), Suzhou, China **07/2024-08/2024**

E-commerce Operations Analysis Intern

- Developed a machine-learning pricing model in Python.
- Conducted SQL-driven competitor analysis, and built Tableau dashboards for strategic decision-making.

Shangjiao (Suzhou) Digital Technology Co., Ltd., Suzhou, China **12/2023-02/2024**

Data Analyst Intern, R & D Department

- Executed advanced feature engineering and hyperparameter tuning for models using Scikit-learn and TensorFlow.
- Applied hierarchical clustering and PCA for dimensionality reduction and enhanced customer segmentation.
- Developed and optimized time-series forecasting models to predict sales trends and improve inventory management.

Everbright Securities (Online), Suzhou, China **07/2023**

Intern, Big Data Analytics Department

- Analyzed China's May GDP and CPI using econometric models for industry impact assessment.
- Used XGBoost and ARIMA to forecast new energy vehicle market trends.

Huhtamaki (Xuzhou) Packaging Co., Ltd., Xuzhou, China **01/2023-02/2023**

Intern, IT Department

- Architected a Hadoop cluster to process production data, optimizing operations for paper packaging workflows.
- Enhanced Spark jobs for analyzing production metrics, reducing processing time, and improving decision-making.

CITIC Securities, Xuzhou, China **07/2022-08/2022**

Intern, Investment Consultant Assistant

- Developed asset allocation strategies for high-net-worth clients through financial market analysis.
- Utilized ARIMA models and neural networks to forecast investment trends.

PROJECTS

Research Assistant, **SURF Project, Xi'an Jiaotong-Liverpool University** **06/2024-08/2024**

- Designed and implemented a framework for analyzing high-frequency trading (HFT) data using Apache Spark for distributed processing.
- Applied statistical methods and machine learning techniques, including ARIMA and clustering, to identify trading signals and short-term price movements.
- Developed a backtesting engine to simulate trades, assess performance metrics (Sharpe ratio, maximum drawdown), and analyze the impact of latency and slippage on execution.

Participant, **Introduction to Financial Markets-How Investors Can Value Stocks and Bonds** **09/2023-03/2024**

- Applied regression models in Stata to evaluate R&D impact on stock valuation in China.
- Conducted advanced stock and bond valuation using DCF models and yield curve analysis.

- Published a paper "Innovation-Driven Stock Valuation: The Influence Mechanism of R&D Investment in China Stock Market" (See publication for details).

Virtualization Technology Intern, **Tencent Training Program** **07/2023**

- Optimized virtual environments (VMware, VirtualBox) to enhance computational efficiency for data-intensive tasks on Ubuntu/CentOS.
- Automated data infrastructure deployment using Vagrant and Ansible, facilitating streamlined data analysis workflows.
- Implemented network optimizations with Open vSwitch to ensure high-performance data processing environments.

PUBLICATIONS

Chen, Shuhan (2024). **"Innovation-Driven Stock Valuation: The Influence Mechanism of R&D Investment in China Stock Market"**, published in *Advances in Economics, Management and Political Sciences*, 80, 284-294. (https://www.ewadirect.com/proceedings/aemps/article/view/12138)

- **Description:** Utilized multiple regression analysis to demonstrate a positive correlation between R&D investment and stock valuation using data from Shenzhen and Shanghai exchanges (2017-2022).

Chen, Shuhan (2024). **"Data Analysis and Mining of User Behavior on E-Commerce Platforms",** accepted by *ICIEC*

- **Description:** Applied statistical modeling, K-means clustering, random forests, and neural networks to analyze e-commerce user behavior, enhancing predictions and optimizing marketing strategies.

COMPETITIONS

2024 APMCM Asia-Pacific Mathematical Contest in Modeling (Chinese Section) **07/2024**

Team leader (Project Topic: Advanced Machine Learning for Flood Disaster Prediction and Prevention)

- Developed an XGBoost model for flood prediction (RMSE 0.046) using Pearson correlation for feature selection, combined with K-means clustering and Principal Component Regression for risk analysis,
- Used MATLAB and Python for comprehensive data modeling.

Kaggle Competitions **2023-2024**

- **LLM-Detect AI-Generated Text (01/2024):** Bronze Medal. Developed BERT models for text detection.
- **Optiver-Trading at the Close (03/2024):** Bronze Medal. Predicted stock movements using time series analysis.
- **Kaggle-LLM Science Exam (10/2023):** Silver Medal. Applied GPT-3 for scientific question answering.
- **Learning Agency Lab-PII Data Detection (04/2024)**: Ranked 578th/2048. Developed NLP models for PII detection.
- **HMS-Harmful Brain Activity Classification (04/2024)**: Ranked 311th/2767. Used CNNs and LSTMs for brain activity classification.

QUALIFICATIONS AND SKILLS

- **Data Visualization:** Tableau, Matplotlib, Excel, PowerBI, Seaborn
- **Programming:** Python, R, MATLAB, SQL, C, C#/C++, JAVA, LaTeX, SQL, JS and VBA
- **Big Data Technologies:** Hadoop, Spark, MySQL, Hive
- **Machine Learning**: Linear regression, decision trees, SVMs, K-means for predictive modeling, classification, and clustering
- **NLP/LLMs**: Text preprocessing, sentiment analysis, BERT/GPT for text generation, summarization, and chatbot development
- **Certification:** Junior Data Analyst Certificate (BDA), 10/2023.
  NVIDIA – **Building Transformer-Based Natural Language Processing Applications**
  NVIDIA – **Fundamentals of Accelerated Computing with CUDA C/C++**

ENGLISH PROFICIENCY AND TESTS

- **IELTS:** Total: 7.0 (R: 7.0; L: 7.0; S: 6.5; W: 7.0)
- **GRE: Total: 321（待定）**