Zixu (Jeremy) Lin

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EDUCATION

Carnegie Mellon University   **Aug. 2022 - Dec. 2023**
Master of Information Systems Management - Business Intelligence and Data Analytics   *Pittsburgh, PA*
• Coursework: Machine Learning for Problem Solving, Unstructured Data Analytics, Introduction to Deep Learning

Zhejiang University of Technology   **Sept. 2018 - Jun. 2022**
Bachelor of Engineering in Software Engineering, Major GPA: 90/100   *Zhejiang, China*

WORK EXPERIENCE

SOIL - School of Innovation and Leadership 4.0   **Jun. 2023 – Aug. 2023**
AI/ML Engineer   *Pittsburgh, PA (Remote)*
- Developed a hybrid recommendation engine integrating content-based filtering and collaborative filtering tailored for the education domain, effectively enhancing user experience and engagement.
- Leveraged advanced machine learning algorithms to analyze user preferences and historical interactions with content, optimizing the recommendation process.
- Automated the testing process with RPA tools to test the robustness of the recommendation engine.

Hangzhou Sui Ren Technology   **Sept. 2021 – Nov. 2021**
Data Scientist   *Zhejiang, China*
- Developed a classification model to build a pairs trade strategy for Cryptocurrency; improved the model's prediction accuracy from 55% to over 75% by switching from a simple logistic regression model to a complex neural network model.
- Constructed a Long-Short Term Memory (LSTM) model to predict the skewness, kurtosis, standard, deviation, and volume over the subsequent hour; Used the XGBoost model to predict the changes of price by these four values.
- Applied Alphalens framework to analyze the statistical results of alphas and performed extensive statistical analysis using Python (NumPy), Excel and R.

Zhejiang Ying Yang Asset Management   **Apr. 2021 – Aug. 2021**
Quantitative Developer   *Zhejiang, China*
- Developed a CNN/LSTM-based model using a dataset during 2015-2021 to forecast changes in price to facilitate trading decisions.
- Monitored the performance of strategies in real-time by using a customized monitoring tool and communicated the situation and requirements to quant developers in time.
- Processed data according to development requirements and transformed original data into training data through feature engineering; constructed relevant factors to ensure the interpretability of the model (pandas, NumPy).
- Improved and optimized the performance of the model from 5% returns to 15% returns by back-testing models and strategies.

Zhejiang Hui Yi Network Technology Co. Ltd   **Jul. 2019 – Aug. 2019**
Software Engineer   *Zhejiang, China*
- Created the backend of the registration system using Python (Flask); Connected it with PostgreSQL in SQLAlchemy.
- Automated the testing process by using RPA tools (UiPath) to verify workflow execution and cover corner cases.

SKILLS & INTERESTS

- **Skills:** Python, Machine Learning, Scikit-learn, SQL, R, Pandas, NumPy, TensorFlow, Time Series Analysis, Forecasting, Data Analytics, Excel, Database.
- **Interests:** Board Game, Poker, Video Game, Basketball