Jason Xu

0466 273 028 xungui.xu@gmail.com

SUMMARY

Highly skilled Master of Information Technology graduate specialised in data science and engineering, with a year of experience as a Quant Developer. Seeking a challenging data related position to apply my diverse skill set and drive innovation in the tech industry.

EDUCATION

Master of Information Technology Jun2020 - Jun2022
University of New South Wales
Relevant courses: Data Warehousing & Data Mining, Data Structures & Algorithms, Artificial Intelligence, Machine Learning & Data Mining, Neural Networks & Deep Learning

Bachelor of Engineering (Honours) in Civil Engineering Mar2016 - Nov2019
University of Technology Sydney

WORK EXPERIENCES

Quant Developer Apr2022 - Current
Edge Ark Pty Ltd

- Cooperate with quantitative traders to analyse 20+ large noisy datasets and identify market signals to develop effective algorithms and models
- Assist in validating that 3 financial models have been correctly implemented for their intended use, and worked on general efficiency improvement and optimization
- Provide support in development, QA and 100+ production issues

PROJECTS

CNN-LSTM-Based Model for price prediction | Python, C

- Implemented a cutting-edge CNN-LSTM forecasting model for stock prices, achieving an impressive 15% increase in prediction accuracy compared to traditional models
- Conducted a comprehensive analysis by employing multiple forecasting models, including CNN, RNN, and CNN-RNN
- Extracted key features from 10 days' worth of historical data using CNN, ultimately contributing to a more reliable price forecasting method

Rainfall prediction using data from polarimetric radars | Scikit-learn Python

- Pre-processed dataset by filling missing values, excluding extreme values, and applied robust scaler on 22 features to reduce differences
- Applied 4 supervised machine learning algorithms which are Decision Tree Regressor, LASSO Regression, Bayesian Ridge Regression, and Linear SVR
- Conducted k-folds cross-validation with 30% of dataset as training set and 5-folds splitting, achieved lowest mean absolute error (13.911) with Linear SVR model

Biological Cells Tracking | Python, OpenCV, Scikit-image

- Conducted analysis on a dataset consists of four image sequences, each from a separate time-lapse microscopy recording with 91 images
- Achieved an accuracy of 98% on cell and movement tracking, and an accuracy of 90% on cell dividing tracking on dense cells images

SKILLS

- Programming Languages: Python3 (NumPy, Pandas, Matplotlib, Scikit-learn, PyTorch), C, C++, JavaScript
- Data analysis tools: MATLAB, Tableau, Excel, SPSS

REFEREES

Available upon request