Tianhao(Evan) Xu

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Education

University of Amsterdam & Vrije Universiteit Amsterdam — Amsterdam, Netherlands
Master of Computer Science - Big Data Engineering Track — *Sep 2021 - Aug 2022*

Macau University of Science and Technology — Macau, China
Bachelor of Software Engineering — *Sep 2017 - Aug 2021*

- Thesis: Using Different Deep Learning Models to Detect COVID-19

Work and Research Experience

Product Manager — November 2021 – Present
Genzon Investment Group — *Shenzhen, China*

- Participated in the digital transformation projects of the company, such as smart buildings, online service of enterprise and investment promotion of enterprise service.
- Conducted market and customer research, developed specific product planning and provided effective solutions in accordance with the company's strategic plan.
- Took charge of the product architecture, prototype design, completed the first phase of the plan, and promoted the development and release.

Data Engineer — November 2021 – Present
SAIC Motor Corporation Limited (SAIC Motor) — *Shanghai, China*

- Completed massive data processing and development to meet various data application needs.
- Conducted system performance analysis and system optimization, improved system operation efficiency.

Research Intern — April 2020 - February 2021
Advised by Jiyue Jiang — *China*

- Researched on the judgment of stock price based on artificial neural network.
- Proposed a model can accurately judge the future price trend of stocks, and the model runs faster, which fundamentally solves the defects of the traditional forecasting methods of slow operation efficiency and low forecast accuracy.

Projects

Machine Learning for Quantified Self | *Python, Time Series Prediction* — June 2022 – July 2022

- Predicted the activity of each subject by using sensor data.
- Applied the optimized LSTM model to deal with multivariate time series. It was added by the dense layer and dropout, which greatly improved the accuracy of the training and test sets.

Recommender system: Personalize Expedia Hotel Searches | *Python, Data Mining* — April 2022 – June 2022

- Explored and analyzed the Expedia hotel dataset, which contained 5 million search hotel queries by real users.
- Leveraged data mining techniques to train a model that can be adapted by the search engine to predict users' choices and rank the hotels based on the user's history searching records. The lightGBM model worked best.

Using Different Deep Learning Models to Detect COVID-19 | *Python* — December 2020 – September 2020

- Built an early screening model using deep learning techniques to distinguish COVID-19 from CT images of lungs in healthy cases.
- Helped doctors to make rapid diagnoses and improve diagnostic efficiency from AI.

- Completed the comparison experiment of several deep learning models for image classification, DResUnet had had the best results with 85.54% Accuracy and 87.02% AUC.

Tencent Data Analysis | *Python, R* August 2020 – September 2020

- Analyzed the membership system data of Bealead Group, evaluated the sales growth, and analyzed the correlation between the membership system construction and sales revenue.
- Established the sales forecast model of social platform through linear regression to determine the relevant characteristics of users with higher consumption, formulated accordingly marketing plan.
- Analyzed the user behavior data of Mobike, established a clustering model to group users, and made precise marketing recommendations based on the different characteristics of the user groups.

Visualizing Psychological Networks | *R* October 2019 – November 2019

- Used network analysis to examine OCD and depression symptoms in adults.
- Made use of the Fruchterman-Reingold (FR) algorithm to graph and understood the complex relationship between OCD and depressive symptoms which provided valuable insights for clinicians and researchers.

Publications

Stock Price Prediction Based on Artificial Neural Network
X. Kan, M. Miao, L. Cao, T. Xu, Y. Li and J. Jiang
Machine Learning, Big Data and Business Intelligence (MLBDBI), 2020

Technical Skills

Languages: Chinese(native), English(Advanced)
Frameworks: Pytorch, Tensorflow
Programming: Python, SQL, C, C++, R, Java, Haskell
Tools: Axure, PowerBI, MindManger, AWS, Docker

Awards & Certification

The Provincial Award in the 6th National Internet + Innovation and Entrepreneurship Competition – October 2020
Huawei Cloud Artificial Intelligence Skills Certification – August 2020
Huawei Cloud Kunpeng Skills Certification – August 2020