Boyuan Tan

Tel: +61 0493320702 Address: Ultimo, Sydney, NSW
Email: btan8779@uni.sydney.edu.au;boyuan_tan@163.com

Education

The University of Sydney	Data Science (Master)(79.5/top 20%)	From 2023.02
	Data Science(Graduate Certificate)	2022.08-2022.12
Nanchang University	Mathematics and Applied Mathematics(Bachelor)	2016.09-2020.06
	Finance（Bachelor Double Degree）	2017.09-2019.06

Honors Third Prize in the National College Student Entrepreneurship Competition;
Third Prize in the Internet+ Innovation and Entrepreneurship Competition - College Level;
Active Participant in Social Activities at the School of Science.

Professional Skills

- Familiar with the use of **Linux** operating system and proficient in using open-source frameworks such as **TensorFlow, PyTorch**
- Familiar with common deep learning algorithm models, including **VGG, GAN, UNET, EfficientNet, LSTM, Transformer,** etc.
- Proficient in data analysis with **Python, SQL, R** and familiar with visualization tools such as **Tableau**, **Tulip, yEd, Gephi** and **Excel** to provide strong support for data-driven decisions.

Project

High-quality PET image synthesis from Low-dose PET image (Capstone Project) From 2023.07

- Synthesis high-quality SPET(standard-dose PET) images from LPET(low-dose PET) images to reduce the risk of cumulative radiation exposure and assist the medical diagnostics. The project has currently implemented basic model on the 2D and 3D input data. In the future, there are plans to enhance training outcomes by refining the input and loss functions.

Analysis of classifiers robust to noise labels From 2023.10

- Based on three different datasets, two of them have known flip rates and one of them doesn't have flip rate, we hope to implement at least two different classifier algorithms and analyze the robustness of them on noise labels.

Robustness analysis of NMF algorithm 2023.09-2023.10

- Based on the ORL and Extended YaleB datasets, we implement the Basic, L1-Norm and L2,1-Norm NMF algorithms and analyze the robustness of the NMF algorithm when the dataset is contaminated by large noise or damage.

Multi-label Image Classification 2023.04-2023.05

- The objective of this project is to tackle a multi-label classification problem that combines both image and text classification. The dataset comprises a total of 30,000 images, and the numerical labels fall within the range of 1 to 19 (excluding 12). The model has the size constraint of 100M. By integrating both models, a final f1-score of 0.854 was attained.

Data Science（Virtual Experience Program） 2023.07-2023.08

- **Cognizant:** For Gala Groceries, we developed a machine learning model using sales and sensor data to forecast hourly inventory levels, facilitating intelligent procurement and ensuring its seamless integration and deployment within their production system.
- **Delotte:** We harmonized telemetry data improved industrial IoT monitoring and proposed a real-time manufacturing dashboard. Also we detected suspicious web requests, and suggested refinements to the company's salary structure.

Others Rental Price Prediction; Company Bankruptcy Prediction;
Restaurant Information Management Framework; Unicorn Companies Visual Analysis;
Business Analysis Report; Research Report on Overseas Listing for Companies

Campus

Enactus (Project Consultant, Team Leader Assistant);
Work-Study Service Center (Deputy Head);
Information Technology Office (Student Assistant);

Language and Others

IELTS Score of 6.5;
Mandarin Proficiency Certificate (Level 1, Grade B)
High School Mathematics Teaching Qualification Certificate
Securities Industry Qualification Certificate