# YUE WU

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## EDUCATION

**Southern University of Science and Technology, SUSTech**, Shenzhen  *07/2023-05/2024*

Bachelor of Statistics,GPA: 3.80/4.00

- Main Courses: Statistical Learning(98),Time Series Analysis(92),Operations Research and Optimization(90), Probability Theory and Mathematical Statistics(97),Statistical Computation and Software(91)

## RESEARCH EXPERIENCE

**Personalized Knowledge Graph Summarization with LLM**  **Research Assistant**

*Supervisor: Prof. Yujun Yan, Dartmouth*  *08/2024-present*

- Goal: Designed a personalized knowledge graph summarization algorithm using LLM based on historical data.
- Contribution: Conducted research on Knowledge Graph Reasoning algorithms and Question-Answering databases. Utilized all-MiniLM-L6-v2 to construct a text-based question similarity graph and historical data. Designed the algorithm using LLM as logical judgment combined with historical data.

**Application of Deep Learning in Multi-Agent Financial Simulation**  **Research Assistant**

*Supervisor: Prof. Peng Yang, SUSTech*  *07/2023-05/2024*

- Model Building: Developed a transformer-based autoencoder with a novel calibration method, improving multi-agent LOB financial simulator's performance by over 50%, and conducted comprehensive experiments with visualizations and ablation studies for model analysis.
- Co-authored a paper submitted to TNNLS. Preprint Link Here.

**Alzheimer Diagnosis through Audio Analysis**  **Research Assistant**

*Supervisor: Prof. Xiang Fan, Peking University Hospital Shenzhen*  *08/2023-08/2024*

- Model Building: Developed an end-to-end classification framework for automatic screening detection of cognitive impairment (CI) based on the Cookie Theft picture description task with a multilingual dataset. I designed the entire model: ASR for converting speech to text, LLM for feature embedding and language alignment, and a neural network classifier.
- Write a paper as the first author, submitted to ADJ.Manuscript Link Here.

**Employee Performance Evaluation Using NLP and LLM**  **Research Assistant**

*Supervisor: Prof. Wenqi Fan, PolyU*  *07/2024-present*

- Data Augmentation: Augment employee interview data using traditional NLP (random swapping, deletion, insertion, etc.) and a custom evolution prompt-based LLM method, guided by WizardLM and DEITA and other papers, utilizing advanced tools such as Distilable and DataDreamer.
- Quantitative Scoring: Developed a few-shot and pair-comparing scoring pipeline with LLMs to analyze and quantify employee interview texts for performance and promotion potential evaluation.

## HONORS & AWARD

- The Grand Prize of School Motto "Innovation" Series Scholarship (1%,Top 9, SUSTech)    2024
- First Class of the Merit Student Scholarship(1%, SUSTech)    2024
- iGEM International Competition Gold Medal(10%, Global)    2023
- First Class (First Place) of the Merit Student Scholarship(1%, SUSTech)    2023
- First Prize in the China Undergraduate Mathematical Contest in Modelling(10%, Guangdong)    2023
- Student Cadre Model of Excellence(1%, SUSTech)    2023
- Second Price in The Chinese Mathematics Competitions(15%, Guangdong)    2021

## SKILLS & LANGUAGES

**Computer Skills:** Python,Java ,R , SAS, Hadoop, Spark, Pytorch, Linux, Latex
**Language:**Chinese(Native),English(TOEFL 103).