Kalyakorn Anansiriprapha (Wenying Li)

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EDUCATION

Tsinghua University, Department of Computer Science and Technology　　　　　　　　**Sep 2020 – Present**

Bachelor of Engineering　　　　　　　　*Beijing, China*

- 2020 Beijing Government Scholarship
- **Coursework:** Data Structure, Machine Learning, AI, Data Mining, Deep Learning, Web Development, Computer Network

Shrewsbury International School Bangkok　　　　　　　　**Sep 2018 – July 2020**

Senior High School　　　　　　　　*Bangkok, Thailand*

- **A-LEVEL Grades:** Computer Science (*A**), Mathematics (*A**), Physics (*A*), Mandarin (*A*)
- **UKMT Senior Mathematical Challenge 2018** awarded *BRONZE* Certificate (Top 50%)
- **UK Bebras Challenge 2019** (Computational Thinking Challenge) awarded Certificate of *MERIT* (Top 50%)

SKILLS

Language	English (*IELTS 7.5*), Chinese (*HSK6*), Thai (*Native*)
Technical	Python, SQL, Git, LaTeX
Interests	Badminton and Basketball (Tsinghua CS Department Teams), Tennis, Brazilian Jiujutsu, Snowboarding, Piano

INTERNSHIP

Trexquant Investment LP　　　　　　　　**Aug 2024 – Oct 2024**

Quantitative Alpha Researcher　　　　　　　　*Beijing, China*

- Conducted quantitative research on financial data, identifying patterns with alpha-generating potential.
- Created Event-Driven Alpha signals by analyzing corporate events, capturing abnormal market behavior.
- Proposed and implemented an NGBoost model for Earnings Prediction, achieving a significant improvement in accuracy.

Aqrose Technology　　　　　　　　**Jun 2023 – Sep 2023**

Test Engineer Intern　　　　　　　　*Beijing, China*

- Conducted comprehensive testing of AIDI products using C++, ensuring functionality, stability, and performance.

Obodroid Corporation　　　　　　　　**Jul 2022 – Sep 2022**

Visual Urban Robot Navigation　　　　　　　　*Bangkok, Thailand*

- Developed navigation systems for service robots and wheelchairs using ROS at Bangkok's Bang Sue Grand Train Station.

Bank of Ayudhya PCL.　　　　　　　　**Jul 2019 – Aug 2019**

Digital Banking and Innovation　　　　　　　　*Bangkok. Thailand*

- Assisted in the development of the mobile banking application to improve user experience and increase active user engagement.
- Collaborated with UX/UI designers and developers to ensure smooth implementation of new features and app performance.
- Coordinated promotional campaigns with Pizza Hut and McDonald's, integrating exclusive deals to attract and retain users.

RESEARCH

Research on RAG Optimization based on SAGE-RAG Framework　　　　　　　　**Dec 2024 – Present**

Advisor: Prof. Guoliang Li, Database Research Group, Tsinghua University

- Investigating Retrieval Optimization techniques within the SAGE-RAG framework, focusing on improving retrieval precision, efficiency, and cost-effectiveness in RAG systems.
- Proposed Multi-Hop Retrieval strategies to enhance cross-document reasoning and improve retrieval recall.

PROGRAMMING PROJECTS

Sign Language (ASL) to Text Translation　　　　Python (Pytorch, Scikit-Learn)　　　　**Sep 2024 – Dec 2024**

- Developed an ASL-to-text translation using CNN and StarNet, achieving over 99% accuracy on a dataset of 87,000 images.

GPT-4 based AI Travel Planner　　　　React, Typescript, CSS, HTML　　　　**Feb 2024 – Jun 2024**

- Developed a GPT-4 AI-powered tool to generate personalized travel itineraries, integrating APIs for booking flights, hotels, etc.

ACTIVITIES

Tsinghua Thai Student Association　　　　Head of Activity Coordinator　　　　**Aug 2022 – Jul 2023**

- Organized cultural exchange events and coordinated club collaboration to foster friendships between internationals and locals

Thai-Chinese Student Association　　　　Associate IT Team Leader　　　　**Feb 2022 – Feb 2023**

- Coordinated with the Thai embassy during the 2019 pandemic to negotiate assistance for students affected by the pandemic
- Developed membership database and association website using *React Typescript, Google Firebase and MongoDB database*