# Kaiqiao Hu

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#### **EDUCATION**

**University of Nottingham UK (exchange student)** 

Sep 2023 - Jun 2024

**University of Nottingham Ningbo China** 

Sep 2021 - Expected Jun 2025

BSc Hons Mathematics with Applied Mathematics | GPA: 3.94/4

**Core Module**: Mathematical Analysis, Modelling with Differential Equations, Statistical Models and Methods, Probability Models and Methods, Introduction to Scientific Computation, Stochastic Models, Optimization

#### PROFESSIONAL EXPERIENCES

#### Algorithm Engineer Assistant Intern | Chitone Human Resource Chain Co., Ltd

Aug 2024 - Oct 2024

- Conducted algorithm evaluation and optimization by utilizing Python to extract, compute, and visualize 100K+ data points. Applied statistical analysis and model evaluation metrics to compare the performance of different embedding models
- Implemented methodological improvements to reduce dimensionality, leading to a 25% increase in algorithm accuracy and a 10% efficiency improvement.
- Developed a fully automated clustering package via K-Means and hierarchical clustering to analyze the relationships among recruitment positions, assisting in job market segmentation and trend analysis.

### Business Analyst Intern | Tungee Technology Co., Ltd.

Jul 2024 - Aug 2024

- Learned about the company's AI + big data products, effectively communicated with clients to gather key performance indicators, and collaborated with sales and technical teams to translate data insights into marketing strategies, which helped sales to enhance customer reaching through refined targeting methods.
- Conducted data-driven advertising performance analysis, including regression analysis and A/B testing to
  evaluate key person rates, registration rates, and customer follow-up rates, identifying patterns in user
  search words to provide insights for strategy optimization.

### Digital Government Intern | Tisson Regaltec Communications Tech. Co., Ltd.

Jun 2022 - Jul 2022

- Collected and organized data for use in AI-based decision-making systems, and ensured data quality through preprocessing techniques of data cleaning and normalization.
- Gained hands-on knowledge of AI algorithm development and computer vision, utilized OpenCV for image processing, including edge detection and noise reduction, and employed KNN algorithms for image classification, which successfully lowered error rates in document scanning systems.

#### **PROJECTS & RESEARCH**

Patent: Deed Tax Calculator - Registration Number: 2024SR1405901

Jul 2023 - Jun 2024

- Designed and developed an automated tax computation program that automatically calculates payable deed tax based on individual circumstances. Integrated data input validation to enhance the calculation accuracy.
- Simplified property and land tax policies by creating a user-friendly interface that helps people understand their tax liabilities and improved public financial literacy about property ownership.

#### Research Assistant at University of Nottingham Ningbo

Jun 2023 - Jul 2023

Knowledge graph reasoning

- Performed a literature review on knowledge graph reasoning methods, focusing on applications in semantic data analysis and AI-driven knowledge discovery.
- Built up a knowledge graph with PROTÉGÉ, and leveraged graph-based algorithms to infer new connections and analyze semantic relationships.

#### **EXTRACURRICULAR ACTIVITIES**

#### Peer Mentor, University of Nottingham Ningbo China

2022 - 2023

- Managed the freshmen, organizing class meetings and activities.
- Provided learning advice and supported students in all aspects.

## Science & Engineering Student Association, University of Nottingham Ningbo China

2021 - 2023

Staff, Consultant | Human Resources Department

- Planned and organized university-level activities such as the EV3 Robotics Competition and Python Programming Contest, attracting 2600+ views.
- Rewarded as "Outstanding Staff", and retained as a consultant.

## **SKILLS & INTERESTS**

**Skills:** Programming (Python, Matlab, R, C++), LaTex **Interests**: Piano, swimming, basketball, hiking, traveling

Languages: Mandarin (native), Cantonese (native), English (fluent)