

## Jiaqi GAO (Joey)

1155157043@link.cuhk.edu.hk | (+852) 67399060 | Personal Webpage

### EDUCATION

#### The Chinese University of Hong Kong

Expected Graduation: July 2025

*Bachelor of Science in Computer Science*

- **Cumulative GPA:** 3.737/4.0 (Major GPA: 3.8/4.0)
- **Relevant Coursework:** Data Structures, Design and Analysis of Algorithms, Software Engineering, Artificial Intelligence, Computational Vision and Image, Database System, Operating systems

### HONORS & AWARDS

- Silver Award for Outstanding Academic Performance (Top 1.5% in CS major) 2023-2024
- Dean's List (Top 10% in Faculty of Engineering) 2022 & 2023 & 2024
- Head's List in New Asia College 2022 & 2023
- Honorable Mention of Mathematical Contest in Modeling (MCM) 2022

### RESEARCH EXPERIENCE

#### Automated Essay Evaluation Systems

Sep 2024 - Present

*Supervised by Prof. Irwin King & KEEP*

*Hong Kong SAR*

- Developed personalized essay grading analysis that allowing users to customize grading rubrics and adaptively learn grading pattern, evaluates articles from six attributes based on user-defined rubrics and suggest improving content.
- Implemented the grammar checking function, proposed an approximate matching to calculate offsets to support real-time text replacement options for error correction.
- Designed quantitative criteria to compare the performance in grammar corrections among GEC models and ChatGPT, and in attributes grading and explanations among generative models.

#### Content-Oriented Website Development

Feb 2024 - Apr 2024

*Full stack Developer*

*Hong Kong SAR*

- Developed client-side dynamic social platform using the MERN stack, which consists of MongoDB, Express.js, React, and Node.js, to let users interact through the posting, following, liking, commenting and real-time chatting.
- Implemented advanced platform features including message tag for content filtering and recommendation, along with privacy controls for selective post visibility, enhancing overall user experience.
- Designed the admin panel for managing user permissions, content moderation, system monitoring, data analysis to enhance security and reliability.

#### Adversarial Attacks on Facial Recognition API

May 2023 - Aug 2023

*Supervised by Prof. Tsung-Yi Ho, CUHK*

*Hong Kong SAR*

- Implemented white-box(PDG, C&W) and black-box(SimpleBA) adversarial attacks on facial recognition APIs to effectively alter gender recognition outcomes while maximizing signal to noise ratio.
- Compared various attack models' detection results and confidence changes, using multiple regression to assess attack performance and model robustness.
- Evaluated bias and identified vulnerabilities in facial recognition systems using CelebA facial attributes to enhance model security and performance.

### WORK EXPERIENCE

#### Shokz, North America Business Department

Jun 2024 - Aug 2024

*Data Analyst Intern*

*Shenzhen, China*

- Analyzed traffic and sales data after new product launches, breaking down key performance metrics to identify deviations. Evaluated effect of promotion strategies and proposed adaptive strategies adjustment.
- Built and maintained PowerBI dashboard to evaluate the impact of new products on existing product lines, assisted in optimizing marketing strategies through data-driven insights.
- Conducted year-on-year comparative research of the Amazon Prime Day of 2023 and 2024 to analyze the traffic and sales trends, revealing opportunities for growth and proposing promotion recommendations.

## VOLUNTEER EXPERIENCE

---

### Three Heart Club (Volunteering Education Association)

Sep 2021 - Feb 2023

Association Leader

- Organized voluntary teaching programs including Pui Kiu Middle School Winter Voluntary Teaching and Ningxia Summer Voluntary Teaching.
- Liaised with the Office of Student Affairs at CUHK and Education Foundation to secure vital funding, while establishing communications and assistance with school principal in remote areas.

### Orientation Camp

Aug 2022 - Sep 2022

Team Leader

- Organized a seamless orientation camp by managing venue arrangements, scheduling events, and liaising with multiple departments.
- Facilitated interactive workshops and peer mentoring sessions to support new students' transition and foster community building.

## SKILLS

---

- **Language:** English (IELTS 7.5), Mandarin (Native), Cantonese (Fluent)
- **Programming:** Python{Pytorch, TensorFlow}, C/C++, Java, SQL, PowerBI
- **Others:** Full stack development, Data analytics