Jiaqi GAO (Joey)

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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 whilte-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