

Daniel Shiu-hong KAO

Linkedin: <https://www.linkedin.com/in/danielshkao>

Github: <https://github.com/DanielSHKao>

Website: <https://danielshkao.github.io/>

Email : skao@connect.ust.hk

Mobile : +886 979-738-568

+852 6601-1137

EDUCATION

- **The Hong Kong University of Science and Technology** Hong Kong S.A.R., China
MPhil in Computer Science and Engineering Sep 2023 - May 2025
Supervisor: Professor Chi-Keung Tang
Research focus: deep learning, computer vision, graphics
- **The Hong Kong University of Science and Technology** Hong Kong S.A.R., China
Bsc in Data Science and Technology / Bsc in Computer Science Aug 2019 - Jun 2023
GPA: **3.755**, Major GPA: **3.922**; First Class Honors
- **Northwestern University** Illinois, USA
Exchange Student in McCormick School of Engineering Mar 2022 - Jun 2022
GPA: **4.000**

PUBLICATIONS

- **Deceptive-NeRF: Enhancing NeRF Reconstruction using Pseudo-Observations from Diffusion Models** May 2023
Xinhang Liu, Shiu-hong Kao, Jiaben Chen, Yu-Wing Tai, Chi-Keung Tang
In submission. Preprint released.
- **StableKD: Breaking Inter-block Optimization Entanglement for Stable Knowledge Distillation** Aug 2023
Shiu-hong Kao, Jierun Chen, S.-H. Gary Chan
In submission. Preprint coming soon.
- **Run, Don't Walk: Chasing Higher FLOPS for Faster Neural Networks** Mar 2023
Jierun Chen, Shiu-hong Kao, Hao He, Weipeng Zhuo, Song Wen, Chul-Ho Lee, S.-H. Gary Chan
IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), 2023
- **Integer Partition: Further Discussion of the Number of the Integer-side Triangles** Jul 2018
Shiu-hong Kao, Pohsing Chou, Gerard Jennhwa Chang
Silver medal, Yau's Award.

PROJECTS

- **Dynamic Neural Network Comparison: Efficiency and Performance** Sep 2021 - Jan 2022
Undergraduate Research Opportunities Program (UROP), HKUST
Deep Learning, Computer Vision, Dynamic Neural Network
- **Press Release Classification on Mobile Application** Feb 2021 - Jun 2021
Undergraduate Research Opportunities Program (UROP), HKUST
Android Development, Machine Learning, Natural Language Processing
- **AlignKD: A Low-cost Technique for Convolutional Shortcut Removal** Sep 2022 - Dec 2022
Course Title: COMP4471 Deep Learning for Computer Vision
Deep Learning, Convolutional Neural Networks

TEACHING EXPERIENCE

- **Undergraduate Teaching Assistant** Fall 2022, Spring 2023
Department of Computer Science and Engineering, HKUST
Course: COMP2611 Computer Organization, HKUST
- Assisting with the lab sessions, holding office hours by appointment, providing solutions for in-class exercises.

WORK EXPERIENCE

- **Software Engineer (Summer Intern)** Jun 2021 - Aug 2021
Hong Kong Applied Science and Technology Research Institute
- Designing and developing algorithms to solve problems; researching the latest technologies; tasks including image processing, OCR, data parsing, deep learning, etc.
- **Software Developer (Part-time)** Mar 2020 - Jun 2020
Jing Ping Educational Creation Ltd.
- Implementing a financial system using Python and VBA.

AWARDS

- **Postgraduate Studentship** Academic Year 2023-24
The Hong Kong University of Science and Technology
- Research grant for HKUST Research Postgraduate (RPg) students.
- **First Class Honors** Jul 2023
The Hong Kong University of Science and Technology
- Undergraduate academic award
- **Chern Class Scholarship** Academic Year 2020-21
The Hong Kong University of Science and Technology
- Scholarship for students with excellent performance in mathematics.
- **University Scholarship for Continuing Undergraduate Students** Academic Year 2021-22, 2022-23
The Hong Kong University of Science and Technology
- Academic scholarship for the students at HKUST whose CGA is in the top 10th percentile of all continuing undergraduate students.
- **Silver Medal, Shing-Tung Yau High School Mathematics Award** Jul 2018
National Taiwan University
- National science fair for mathematical research in Taiwan.
- **Dean's List** F2019, F2020, S2021, F2022, S2023
The Hong Kong University of Science and Technology
- Academic award for a high GPA at HKUST.
- **Dean's List (High Honors)** Spring 2022
Northwestern University
- Academic award for a full GPA at NU.

EXTRA-CURRICULAR ACTIVITIES

- **Head Student Ambassador** Nov 2022 - Current
Undergraduate Recruitment and Admissions Office, HKUST
- **Peer Mentor** Aug 2021 - Jun 2022
School of Science, HKUST
- **Sub-Committee Member** Sep 2019 - May 2020
Mainland Student and Scholars Society, UG session, HKUST
- **Deputy Head Student Ambassador** Nov 2021 - Nov 2022
Undergraduate Recruitment and Admissions Office, HKUST
- **Student Ambassador** Nov 2019 - Current
Undergraduate Recruitment and Admissions Office, HKUST
- **Taiwanese Student Association (TSA, HKUST)** Sep 2019 - May 2023
Member in TSA, HKUST
- **Taiwanese American Student Association (TASA, NU)** Mar 2022 - Jun 2022
Member in TASA, Northwestern University

SKILLS

- **Programming:** Python, C/C++, Java, VBA, Matlab, R, HTML/CSS, Assembly
- **Tools:** PyTorch, PySpark, Hadoop, Pandas, Matplotlib, OpenCV, BeautifulSoup, LaTeX, Git, Unix/Linux, AWS, Azure
- **Languages:** English (Proficient), Mandarin (Native), Cantonese (Intermediate), Taiwanese (Native)