

Shiu-hong Kao (Daniel)

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Education

Hong Kong University of Science and Technology

Bsc in Data Science and Technology & Bsc in Computer Science

Sep 2019 – Jun 2023

GPA: 3.764 | Major GPA: 3.893

Northwestern University

Exchange Student in McCormick School of Engineering

Mar 2022 – Jun 2022

GPA: 4.000

Research / Publication

Divide and Distill: A Fast Knowledge Distillation Framework

First Author, under preparation for submission

A fast-converging and data-efficient algorithm for knowledge distillation with accuracy higher than state of the art

Run, Don't Walk: Chasing Higher FLOPS for Faster Neural Networks

Second Author, under review by CVPR 2023

A faster and effective separable convolutional layer to improve the performance of existing approaches such as Depthwise Convolution and Group Convolution

Integer Partition: Further Discussion of the Number of the Integer-side Triangles

First Author, Silver Medal at Yau's Award 2018

A closed-form solution for the number of integer-side quadrilaterals with perimeter m and a recursive relationship for the number the integer-side n -sided polygons with perimeter m

Academic Projects

Dynamic Neural Network Comparison: Efficiency and Performance

Sep 2021 - Jan 2022 | Supervisor: S.-H. Gary Chan

Undergraduate Research Opportunity Program (UROP), HKUST

Practical ML-based Mobile Application

Feb 2021 - Jun 2021 | Supervisor: Dimitris Chatzopoulos

Undergraduate Research Opportunity Program (UROP), HKUST

AlignKD: A Low-cost Technique for Convolutional Shortcut Removal

Sep 2022 - Dec 2022 | Course: Deep Learning in Computer Vision

Course project at HKUST

Teaching Experience

Undergraduate Teaching Assistant

Hong Kong University of Science and Technology

Sep 2022 - Dec 2022 | Course: Computer Organization

Assisting with lab session, holding office hours by appointment,
providing solutions for in-class exercises

Work Experience

Software Engineer (Summer Intern)

Hong Kong Applied Science and Technology Research Institute

Jun 2021 - Aug 2021

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)

Jing Ping Educational Creation Ltd.

Mar 2020 - Jun 2020

Implementing a financial system for the company's use. VBA and
Python are involved

Awards / Scholarship

S.S. Chern Class Scholarship

Hong Kong University of Science and Technology

Academic Year 2020-21

Scholarship for students with excellent performance in mathematics

University Scholarship for Continuing Undergraduate Students

Hong Kong University of Science and Technology

Academic Year 2021-22, 2022-23

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

National Taiwan University

Jul 2018

National science fair for mathematical research in Taiwan

Dean's List

Hong Kong University of Science and Technology

Fall 2019, Fall 2020, Spring 2021, Fall 2022

Academic award for a high GPA at HKUST

High Honors

Northwestern University

Spring 2022

Academic award for a full GPA at NU

Leadership

Head Student Ambassador

Hong Kong University of Science and Technology

Peer Mentor

School of Science, HKUST

Sub-Committee Member

Mainland Student and Scholars Society, UG session, HKUST

Member, Taiwanese Student Association

Hong Kong University of Science and Technology

Member, Taiwanese American Student Association

Northwestern University