HUANG Tin Yeh (Heaven)

Department of Industrial and Systems Engineering, Faculty of Engineering, The Hong Kong Polytechnic University, Hong Kong SAR, China, 999077 $+852\ 9449\ 8934 \diamond +86\ 198\ 9655\ 5044 \diamond \ https://tyhuang.hk$

 $tin-yeh.huang@connect.polyu.hk \diamond hty25@mails.tsinghua.edu.cn \diamond huangtianye@mails.x-institute.edu.cn$

EDUCATION

The Hong Kong Polytechnic University

B.Eng. (Hons) in Product Engineering with a Second Major IE B.Eng. (Hons) Scheme in Product and Industrial Engineering

Associate in Statistics and Data Science

Tsinghua University (Exchange) B.Eng. in Creative Design and Intelligent Engineering

Tsinghua TEEP & X-Institute

Jointed Training Research Scholar (Track of Social Innovation)

Supervisor: Prof. Ming TANG

Shenzhen Medical Academy of Research and Translation

Visiting Research Student - Mingxu Hu's Lab Supervisor: Dr. Mingxu HU (PI), Dr. Qi ZHANG

Exchange

1) Semester Exchange (2025/2026 Semester 1), Tsinghua University

2) Social Innovation Training, Tsinghua TEEP & X-Institute & ByteDance Ltd. & Accenture Co. Ltd.

3) AI Winter School 2025, Center for the Fundamental Physics of the Universe & Brown University

4) 2024 Ministry of Education of PPC Teacher and Student Exchange Plan - Human-machine Shared Control Intelligent Car Project, Northeastern University & The Hong Kong Polytechnic University

5) X-Challenge 2024: Interdisciplinary Cutting-edge Disruptive Innovation Challenge, Tsinghua TEEP & X-Institute

6) X-Idea 2023: X-Institute International Summer School, Tsinghua TEEP & X-Institute

Shenzhen, Guangdong, China

Hong Hum, Kowloon, Hong Kong SAR

September 2025 - May 2028 (Expected)

September 2024 - May 2028 (Expected)

September 2025 - January 2026 (Scheduled)

September 2024 - August 2025

September 2023 - August 2024

June 2025 - July 2025

September 2025 - January 2026

January 2025 January 2025

Beijing, China

Beijing, China

December 2024

June 2024 - July 2024

June 2023 - July 2023

PUBLICATIONS

Wang, X.*, Huang, T. Y., Jiang, Z., Wang, Y. "Bio-Cryptography: Dual Deep Learning Framework for Protein Watermarking via Geometric-Chemical Fingerprinting" International Conference on Machine Learning (ICML) 2025 Workshop on NewInML

https://openreview.net/forum?id=ytGQdYnvn4

Wang, Y.*, Wang, J., Huang, T. Y., Yang, J., Yang, G., Xu, Z. "STGCN-LSTM for Olympic Medal Prediction: Dynamic Power Modeling and Causal Policy Optimization" International Conference on Machine Learning (ICML) 2025 Workshop on NewInML

https://openreview.net/forum?id=HOKfFNisPe

Wang, Y.*, Cai, M., Huang, T. Y. "AI for Disease Prediction: Performance Insights and Key Limitations" Journal of Clinical Neuroscience 138,

https://doi.org/10.1016/j.jocn.2025.111360

2025

Wang, X.*, Wang, Y.+, Huang, T. Y.+, "Crypto-ncRNA: Encryption Algorithm Based on Non-Coding RNA (ncRNA)" International Conference on Learning Representations (ICLR) 2025 Workshop on AI for Nucleic Acids (NA)

https://openreview.net/forum?id=j60DUDw4vN

2025

First Author + Co-First Author

ACADEMIC PARTICIPACTION

ICML 2025 Workshop · 2nd AI for MATH Reviewer 2025 Reviewer F1000 Research 2025

WORK EXPERIENCE

Visiting Student · Cryo-EM & Cryo-ET Research

Jun 2025 - Jul 2025

Shenzhen Academy of Research and Translation (SMART) & Shenzhen Bay Laboratory (SZBL) Jointed Summer Internship

Member, District Youth Development and Civic Education Committee

April 2025 - April 2027 (Expected)

Home Affairs Department (HAD), Hong Kong SAR Government

AI Agent R&D Parttime

March 2025 - Present

Apricot AI Ltd.

Assistant to the President (Management & Technical Director)

Hong Kong MBA Institute

February 2025 - Present

AI Product & Algorithm R&D Intern

Qingbei Intelligent Technology Co., Ltd.

February 2025 - Present

Oct 2024 - Present

Student Intern

Research Centre - Data Science and Artificial Intelligence (RC-DSAI), HK PolyU

Oct 2024 - Oct 2025 (Expected)

Student Assistant

Knowledge Transfer and Entrepreneurship Office, HK PolyU

Student Assistant

Mar 2023 - May 2023

Division of Science, Engineering & Health Studies, CPCE, HK PolyU

AI & Data Trainee Royal Plaza Hotel (Accounting & IT Dept.) Dec 2023 - Apr 2024

Design Optimization of Hydraulic Press Plate using Finite Element

Analysis

Major Project as a part of curriculum

- · An Industrial Defined Project in collaboration with Incredible Machines, Rajkot
- Designed and performed an FEA analysis of the plates of Hydraulic machine with the capacity of 250-ton
- · Optimization in terms of design and material reduction, leading to cost effectiveness, considering minimum deformation of plates during operation

Head coordinator of Mechanical section at Robotics club

July 2015 - May 2016

January 2016 - April 2016

Sanjaybhai Rajguru College of Engineering

- · A college level Robotics club established by students with the aim of learning and professional skill development among students and peers
- · Lead in Mechanical work of Robotics club, working mostly with CAD and Hardware systems
- · Team leader and active member working to develop various robots of different concepts and configurations

VOLUNTEERING

Master of Ceremonies - 75th PRC National Day Luncheon

Hong Kong Federation of Trade Unions (HKFTU)

Student Representative of B.Eng. (Hons) Product and Industrial Engineering (45498-PIE)

 $September\ 2024\ -\ Now$

Department of Industrial and Systems Engineering, The Hong Kong Polytechnic University

Student Representative of Associate in Statistics and Data Science (8C112-SDS)

September 2023 - August 2024

Division of Science, Engineering, and Health Studies (SEHS), College of Professional and Continuing Education (CPCE), PolyU

Student Assistant, CPCE, HK PolyU (Social Service Hours > 30 Hours)

October 2023 - October 2024

ACHIEVEMENTS

HKSAR Government Scholarship Fund – Reaching Out Award (ROA) PolyU Entry Scholarship (The Hong Kong Polytechnic University)

2025 2024

Microsoft Certified: Azure AI Fundamentals

2021

SKILLS AND INTERESTS

Computer-based Python (Pandas, PyTorch, TensorFlow, etc.), C++, SQL, SAS, R, CAD&CAE (SolidWorks), Adobe (Photoshop, Illustrator,

InDesign), IMOD, PyMol, ChimeraX, LaTeX, MS Office

Manufacturing Additive Manufacturing (FDM, SLA, SLS, etc.), Reverse Engineering, Quality Engineering, Robotics (Arduino/Raspberry

Pi), Benchwork, Engineering Drawing

Business Engineering Economics, Management and Organization, Marketing, Market Analysis, Engineering Law

Product & Industrial Design, Product Development, Project Management, Design Thinking, Design for Many(Optimizing, Soft skills

Manufacturing, Sustainability, etc.), Human-centered Design

Languages Cantonese/Mandarin (Native), English (Fluent)

DECLARATION

I hereby declare that all the details furnished above are true to the best of my knowledge and belief.

Oct 2024