# JIERUN CHEN

\*Research Interest: AIGC, Vision Language Models, Efficient AI, Compression, and Acceleration

#### **EDUCATION**

The Hong Kong University of Science and Technology  Ph.D. in Computer Science and Engineering  Supervisor: Shueng-Han Gary Chan	Sep 2019 - Jan 2025
<b>Zhejiang University</b> B.Eng in Electrical Engineering and Automation, GPA: 3.8 / 4.0, Top 15% High Distinction from Edison Experimental Class	Sep 2014 - June 2018
Singapore University of Technology and Design Exchange Student in Engineering Product Design, GPA: 5.0/5.0, Top 3%	Sep 2016 - Dec 2016

WORKING EXPERIENCE  Feb 2024 Aug 2024		
Snap Research, Los Angeles	Feb 2024 - Aug 2024	
Research intern on efficient text-to-image models, supervised by Jian Ren and Anil Kag		
Microsoft Research Asia, Beijing	June 2023 - Feb 2024	
Research intern on multimodal large models, supervised by Fangyun Wei		
Unity Drive Innovation, Shenzhen	Sep 2018 - Jan 2019	
SLAM algorithm intern, supervised by Qinghai Liao	-	

#### **PUBLICATIONS**

- 1. SnapGen: Taming High-Resolution Text-to-Image Models for Mobile Devices with Efficient Architectures and Training
  - Jierun Chen\*, Dongting Hu\*, Xijie Huang\*, Huseyin Coskun, Arpit Sahni, Aarush Gupta, Anujraaj Goyal, Dishani Lahiri, Rajesh Singh, Yerlan Idelbayev, Junli Cao, Yanyu Li, Kwang-Ting Cheng, S.-H. Gary Chan, Mingming Gong, Sergey Tulyakov, Anil Kag, Yanwu Xu, Jian Ren In submission, 2024
- 2. Revisiting Referring Expression Comprehension Evaluation in the Era of Large Multimodal Models Jierun Chen\*, Fangyun Wei\*, Jinjing Zhao, Sizhe Song, Bohuai Wu, Zhuoxuan Peng, S.-H. Gary Chan, Hongyang Zhang In submission, 2024
- 3. FasterKD: Disentangling Inter-block Optimization for Efficient Knowledge Distillation Shiu-hong Kao\*, Jierun Chen\*, S.-H. Gary Chan In submission, 2024
- 4. AsCAN: Asymmetric Convolution-Attention Networks for Efficient Recognition and Generation Anil Kag, Huseyin Coskun, Jierun Chen, Junli Cao, Willi Menapace, Aliaksandr Siarohin, Sergey Tulyakov, Jian Ren NeurIPs, 2024
- 5. Run, Don't Walk: Chasing Higher FLOPS for Faster Neural Networks 700+ stars Jierun Chen, Shiu-hong Kao, Hao He, Weipeng Zhuo, Song Wen, Chul-Ho Lee, S.-H. Gary Chan CVPR, 2023

- TVConv: Efficient Translation Variant Convolution for Layout-aware Visual Processing <u>Jierun Chen</u>, Tianlang He, Weipeng Zhuo, Li Ma, Sangtae Ha, S.-H. Gary Chan CVPR, 2022
- Joint Demosaicking and Denoising in the Wild: The Case of Training Under Ground Truth Uncertainty <u>Jierun Chen</u>, Song Wen, S.-H. Gary Chan AAAI, 2021
- Target-agnostic Source-free Domain Adaptation for Regression Tasks Tianlang He, Zhiqiu Xia, <u>Jierun Chen</u>, Haoliang Li, S.-H. Gary Chan ICDE, 2024
- 9. CP-NeRF: Conditionally Parameterized Neural Radiance Fields for Cross-scene Novel View Synthesis Hao He, Yixun Liang, Shishi Xiao, <u>Jierun Chen</u>, Yingcong Chen Pacific Graphics, 2023
- FIS-ONE: Floor Identification System with One Label for Crowdsourced RF Signals Weipeng Zhuo, Ka Ho CHIU, <u>Jierun Chen</u>, Ziqi Zhao, S.-H. Gary Chan, Sangtae Ha, Chul-Ho Lee ICDCS, 2023
- 11. Semi-supervised Learning with Network Embedding on Ambient RF Signals for Geofencing Services Weipeng Zhuo, Ka Ho CHIU, <u>Jierun Chen</u>, Jiajie Tan, Edmund Sumpena, Sangtae Ha, S.-H. Gary Chan, Chul-Ho Lee ICDE, 2023

#### **PATENT**

US patent, Ref.: IP.PA.01826, IIL Ref.: P2651US00, "Run, Don't Walk: Chasing Higher FLOPS for Faster Neural Networks"

#### SELECTED AWARDS

- RedBird Academic Excellence Award, HKUST, 2022
- Postgraduate Scholarship, HKUST, 2019-2023
- Outstanding Graduate, ZJU, 2018
- Scholarship for Excellence in Research and Innovation, ZJU, 2017
- 1st prize in Nanjiang Lebo Cup Provincial Robot Competition (ranked 1/62), 2017
- 1st prize in National Undergraduate Electronic Design Contest (ranked 3/109 in Zhejiang Division), 2017
- Scholarship for Outstanding Merits, ZJU, 2015, 2017
- Excellent Student Awards, ZJU, 2015, 2017

### TEACHING ASSISTANT

- COMP 2012H Honors Object-Oriented Programming and Data Structures, Fall 2022
- COMP 4911/6613D/ENTR4911 IT Entrepreneurship, Fall 2021
- COMP 4021 Internet Computing, Fall 2020
- COMP 4611 Design and Analysis of Computer Architectures, Spring 2020

#### ACADEMIC SERVICES

Conference Reviewer: ICLR, CVPR, ECCV, ICCV, UbiComp, BMVC, ACCV, INFOCOM

Journal Reviewer: IJCV, TIM

## **SKILLS**

- Programming: Python, PyTorch, C/C++, Matlab, HTML, CSS, JavaScript.
- Tools: Unix, Git, Docker, LaTex, Photoshop, ROS, SolidWorks.
- Languages: English (Proficient), Mandarin (Native), Cantonese (Proficient), Teochew (Native).