CHOI Ching Lam

cchoi@link.cuhk.edu.hk | **Personal Website**
Google Scholar| github.com/chinglamchoi | linkedin.com/in/ching-lam-choi/

Education

The Chinese University of Hong Kong (CUHK) Sep 2020 – Present
BEng in Artificial Intelligence: Systems & Technologies (AIST) **GPA: 3.751 / 4.000**

Diocesan Girls' School Sep 2015 – Jul 2020

Deeplearning.ai, Coursera May 2018
The Deep Learning Specialization : *https://coursera.org/share/79cb80a49acd6d0fe866c9d61702362c*

Hong Kong Academy for Gifted Education Jan 2016 – Jul 2020

Publications & Pre-Prints

[1] Rui Liu, Yixiao Ge, **Ching Lam Choi**, Xiaogang Wang and Hongsheng Li, "DivCo: Diverse Conditional Image Synthesis via Contrastive Generative Adversarial Network", in CVPR, 2021

[2] Yixiao Ge, **Ching Lam Choi**, Xiao Zhang, Peipei Zhao, Feng Zhu, Rui Zhao, and Hongsheng Li. "Self-distillation with Batch Knowledge Ensembling Improves ImageNet Classification." arXiv preprint arXiv:2104.13298 (2021)

Work & Research Experience

Topics: *Audio-visual video understanding & generation, self-supervised learning (SSL), generative modeling*

CUHK UG Summer Research : *Intern* Jun – Aug 2021

- Supervisor: Professor Anthony Man-Cho So
- Focus: Deep metric-learning for improving DNN generalisation and robustness

NVIDIA AI Tech Center : *Research Intern* Sep 2020 – Present

- Supervisors/Collaborators: Dr. Charles Cheung, Dr. Simon See
- Focus: Audio-visual video understanding; robust, explainable Generative Adversarial Networks

Multimedia Laboratory, CUHK : *Research Mentee* Aug 2019 – Present

- Supervisor: Professor Hongsheng Li
- Focus: Self-supervised Learning, Generative models, fine-grained video understanding

CityU Apps Lab, City University of Hong Kong : *Summer Lab Intern* Jul 2018 – Sep 2018

- Co-developed learning materials (Python, Tensorflow, linear algebra basics) for CityU's AI Summer Course
- Co-taught & TA'd the AI Summer Course
- Introduced MIT App Inventor to aspiring secondary school teachers through Teach4HK

Professional Volunteering & Services

ICCV 2021 Undergraduates in Computer Vision Social: *Co-organiser & Panelist* Sep – Oct 2021

- Co-organised the UG in CV Social *(inc. 4 keynotes, 1 student panel, 1 mingling/networking session)* with Samarth Sinha; presented on breaking into and publishing research as an undergraduate.
- Keynote speakers Prof. Animesh Garg, Prof. Hugo Larochelle, Prof. Zeynep Akata, Dr. Nan Rosemary Ke shared insights and answered audience's questions on CV research in academia and the industry.

ICLR 2022 CoSubmitting Summer Workshop: *Co-organiser* Aug 2021 – Apr 2022

- Co-organised the CSS Workshop with ICLR DEI Co-chairs Rosanne Liu & Krystal Maughan and more
- CSS supported 55 research proposals by underrepresented groups in ML and first-time ICLR submitters, and provided funding to execute their ideas.

EuroPython 2020 : *Speaker* 24 Jul 2020

- Talk: Corona-Net: Fighting COVID-19 With Computer Vision
- Second-largest Python conference in the world (https://ep2020.europython.eu/talks/HeAc9o4-corona-net/)

JuliaCon 2020 : *Speaker* 31 Jul 2020
- Talk: Julia Track Google Code In and Beyond
- Online conference with over 10,000 unique attendees (https://juliacon2020.now.sh/talk/HJTZNE)

Student Code-in 2020: *Mentor* Jun 2020 – Aug 2020
- Mentored students in the 2-months long programme for the Face Mask Detection project, a Computer Vision system based on OpenCV, Tensorflow and Keras (github.com/chandrikadeb7/Face-Mask-Detection)

Hong Kong Open Source Conference (HKOSCon) 2020: *Speaker* 13 Jun 2020
- Talk: Julia – Looks like Python, feels like Lisp, runs like C/Fortran (https://youtu.be/VKcwnHJm2V0)

Projects

Corona-Net | ***Python:*** *PyTorch, NumPy, Matplotlib;* ***Julia:*** *Flux, Images, CuArrays; Git* Mar 2020 – Jul 2020
- Leveraging U-Net and Efficient-Net for CT COVID-19 segmentation and classification
- Python: (github.com/chinglamchoi/Corona-Net); Julia: (github.com/chinglamchoi/JuliaCon)

MAESTRO.ai TaiChi Tutor | *Tensorflow.js, Bootstrap, Node.js, Git* Jul 2019 – Jan 2020
- Leveraged Tensorflow.js PoseNet model for real-time 2D Human Pose Estimation
- Bridging the intergenerational communication gap in HK through TaiChi

Elesafer | *Python, C++, Darknet, Django* Jul 2018 – May 2019
- Build dataset for and trained YOLOv3 for real-time detection weapons (guns, knives) in CCTV footage

Awards & Recognition

Google Code In 2019: Runner-up Dec 2019 – Jan 2020
Google & The Julia Programming Language
- Created a second order ordinary differential equations (ODE) solver using Neural Networks
- Code open-sourced at: github.com/chinglamchoi/GCI_With_Julia

The 2nd International Artificial Intelligence Fair: First Prize, Academic Scholarship Aug 2020
Sensetime
- IAIF included 1,000+ projects from China, USA, India, Singapore, Singapore, HK, etc

The 5th International Invention Innovation Competition in Canada (iCan 2020): Aug 2020
Best 10 Women Inventors, Special Award (TISIAS), Gold Medal
Toronto International Society of Innovation & Advanced Skills (TISIAS)

Google Hash Code 2020 Online Qualification Round: Oct 2020
14th in Hong Kong, 2531/10724 worldwide
Google

NASA SpaceApps Challenge 2020: HK global nominee, Best Use of Data Award, Most Inspirational Award Oct 2020
NASA, US Consulate General HK & Macau, Hong Kong Observatory, City University of Hong Kong

International Symposium on STEM Education 2019: Best Project Champion, Outstanding Performance Award, Academic Scholarship 25 – 28 Jul 2019
Microsoft, The University of Hong Kong & HKU Academy for the Talented

The 5th International Mathematical Modelling Challenge: First-class Honours (International Round + Greater China Winter Contest), Second-class Honours (Greater China Autumn Contest) Aug 2020
International Mathematical Modelling Challenge

Technical Skills

Languages: English, Mandarin, Cantonese, Python, Julia, C, JavaScript, HTML/CSS
Libraries: PyTorch, NumPy, Matplotlib, Pandas, FluxML, SciML, JQuery