CHOI Ching Lam

 $+852\ 6073\ 3637\ |\ \underline{\text{ccl5a09@gmail.com}}\ |\ \overline{\textbf{Personal Website}}$ 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: 3.803 / 4.000

Diocesan Girls' School

Sep 2015 - Jul 2020

Deeplearning.ai, Coursera

May 2018

The Deep Learning Specialization: https://coursera.org/share/79cb80a49acd6d0fe866c9d61702362c

 $\overline{\text{Jan } 2016} - \text{Jul } 2020$

Hong Kong Academy for Gifted Education

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

UG Summer Research: Intern

Jun - Aug 2021

- Supervisor: Professor Anthony MC So
- Focus: Deep metric-learning for improving DNN generalisation and robustness
- To be submitted (first-author) to ICLR 2022

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

Volunteering Experience

EuroPython 2020: Speaker

24 Jul 2020

- Talk (30 min): 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 (30 min): Julia – Looks like Python, feels like Lisp, runs like C/Fortran (https://youtu.be/VKcwnHJm2V0)

Python Conference Hong Kong (PyCon) 2020: Speaker

8 May 2020

• Talk (30 min): Fighting COVID-19 with Machine Learning (https://youtu.be/cd1j25JxOJc)

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

Oct 2020

Inspirational Award

NASA, US Consulate General HK & Macau, Hong Kong Observatory, City University of Hong Kong

International Symposium on STEM Education 2019: Best Project Champion,

25 - 28 Jul 2019

Outstanding Performance Award, Academic Scholarship

Microsoft, The University of Hong Kong & HKU Academy for the Talented

The 5th International Mathematical Modelling Challenge: First-class Honours

Aug 2020

(International Round + Greater China Winter Contest), Second-class Honours (Greater China Autumn Contest)

International Mathematical Modelling Challenge

FIRST Tech Challenge (FTC): HK: Inspire Award Finalist, Semi-Finalist Alliance

2019

FIRST, The Hong Kong University of Science and Technology

TECHNICAL SKILLS

Languages: English, Mandarin, Cantonese, Python, Julia, C, JavaScript, HTML/CSS

Libraries: PyTorch, NumPy, Matplotlib, Pandas, FluxML, SciML, JQuery