Zhi-Yi Chin (Joyce)

Contact

joycenerd.cs09@nycu.edu.tw

Information

+886972752710

https://joycenerd.github.io

EDUCATION

National Yang Ming Chiao Tung University

February, 2021 - present

Master in Computer Science and Engineering

Expected graduation date: August, 2023 National Chung Cheng University Advised by *Prof. Wei-Chen Chiu*September, 2017 - January, 2021

Bachelor in Computer Science and Information Engineering

Overall GPA: 4.18 / 4.3 Major GPA: 4.21 / 4.3 Ranking: 1 / 43

RESEARCH EXPERIENCE National Chung Cheng University

March, 2020 - January 2021

Machine Vision and Learning Lab Undergraduate Ressearch Assistant

Undergraduate Ressearch Assistant Advised by Prof. Chen-Kuo Chiang

• Published one CVPR Workshop paper

• College Student Research Project: AI calligraphy using 6DoF robotic arm

HONORS AND SCHOLARSHIPS Presidential Honor Award

2017 - 2021

Achieve top 1% in College of Engineering for 5 times

National Chung Cheng University

College Student Research Scholarship

2020

NT\$ 48,000

Ministry of Science and Technology, Taiwan

Google Student Travel Scholarship

2019

Scholarship to attend 2019 Grace Hopper Celebration

 $Google,\ Taiwan$

PUBLICATIONS

Yun-Lun Li, Zhi-Yi Chin, Ming-Ching Chang, Chen-Kuo Chiang. Multi-Camera Tracking by Candidate Intersection Ratio Tracklet Matching, Accepted by Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR) Workshop 2021

Projects

RSNA Pneumonia Detection - Visual Recognition Using Deep Learning January, 2022

- Design a two stage method, which first use a classification model to classify pneumonia, then use a detection model to locate the disease.
- Get the best results when using EfficientNet as classification model with 0.2 classification probability threshold when testing, and YOLOR as detection model. This method can reduce false positive results.
- Boost the final accuracy 2% by resizing the predicted bounding box to 87.5% of the original size.

Generative Models as Data Augmentation - Deep Learning and Practice September, 2021

- Investigate image transformation by exploring walks in the latent space of GAN.
- Use GAN steerability as an data augmentation technique.
- Conclude that GAN steerability is a better data augmentation technique compare to transformation done in the data space.

Reimplementation Challenge - Reinforcement Learning

July, 2021

- Reimplement ICLR 2018 paper: MAXIMUM A POSTERIORI POLICY OPTIMISATION in Pytorch.
- Successfully replicate the results in Cartpole, Hopper and Acrobot in MuJoCo environment

Google CodeU Calendar Helper - Google

August, 2019

- A multifunctional Webapp for to-do lists and calendars.
- Using Javascript and JQuery as front-end and Java as back-end and host the Webapp on Google cloud console.
- Highlights: tagging system, nice dashboard design, synchronize with Google Calendar.

SKILLS

Programming Languages and Frameworks

- Programming Languages: Python/C++/C/MATLAB/LATEX/Java/Javascript
- Machine Learning: Pytorch/OpenCV/scikit-learn
- Dev Tools: Git/Jupyter/Vim/VS Code/ Google Cloud Platform/ PyCharm/IntelliJ IDEA

Languages

- Mandarin Chinese (native)
- English (proficient)