Zhi-Yi Chin (Joyce)

CONTACT INFORMATION

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EDUCATION

National Yang Ming Chiao Tung University   **February, 2021 - present**
Master in Computer Science and Engineering   Advised by *Prof. Wei-Chen Chiu*
Expected graduation date: August, 2023

National Chung Cheng University   **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   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, <u>Zhi-Yi Chin</u>, 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

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

Lane Detection - *Computer Vision*   June, 2021
- Design 3 methods for lane detection (2 traditional computer vision method and 1 deep learning method).
- Introduce hourglass network into the deep learning method and achieve accuracy 97% in TuSimple dataset.
- Realized the importance of data augmentations to boost the the accuracy.

Mango Classification - *AICUP Competition*   June, 2020

- Implement numerous classification model using Pytorch.
- Achieve accuracy 82.32% which place No.8 in the public leaderboard and No.12 in the private leaderboard.
- Embedded the best model into Raspberry Pi 3 by pruning the model until it can run on Raspberry Pi 3.

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)