WEI-CHENG TSENG

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EDUCATION

University of Toronto (UofT) *Sept. 2022 - current*
PhD of Computer Science advised by **Prof. Florian Shkurti**

National Tsing Hua University (NTHU) *Sept. 2019 - Feb. 2022*
MS of Electrical Engineering Overall GPA: 4.30/4.30, advised by **Prof. Min Sun**

National Tsing Hua University (NTHU) *Sept. 2015 - June 2019*
BS of Electrical Engineering Overall GPA: 4.17/4.30, **Rank: Top 3% (3rd/109)**

University of California, Berkeley *July. 2017 - Aug 2017*
Summer Session

PUBLICATIONS

Wei-Cheng Tseng, Ellina Zhang, Krishna Murthy Jatavallabhula, Florian Shkurti, " Gaussian Splatting Visual MPC for Granular Media Manipulation", ICRA 2025

Yi-Shan Lee, **Wei-Cheng Tseng**, Fu-En Wang, Min Sun, "VMCML: Video and Music Matching via Cross-Modality Lifting", *Conference on Computer Vision and Pattern Recognition (CVPR) 2024 workshop*

Wei-Cheng Tseng, Tsun-Hsuan Wang, Yen-Chen Lin, Phillip Isola, "Offline Multi-Agent Reinforcement Learning with Knowledge Distillation", *Conference on Neural Information Processing Systems (NeurIPS) 2022*

Wei-Cheng Tseng, Da-Cheng Juan, Wei Wei, Min Sun, "Meta-CPR: Generalize to Unseen Large Number of Agent with Communication Pattern Recognition Module", pre-print 2022

Wei-Cheng Tseng, Hung-ju Liao, Yen-Chen Lin, Min Sun, "CLA-NeRF: Category-Level Articulated Neural Radiance Field", *International Conference on Robotics and Automation (ICRA) 2022*

Wei-Cheng Tseng, Jin-Siang Lin, Yao-Min Feng, Min Sun, "Toward Robust Long Range Policy Transfer", *AAAI Conference on Artificial Intelligence (AAAI) 2021*

Wei-Cheng Tseng, Jin-Siang Lin, Yao-Min Feng, Min Sun, "HAT: Hierarchical Alternative Training for Long Range Policy Transfer", *International Conference on Machine Learning (ICML) 2020 workshop*

Wei-Cheng Tseng, Cheng-Kuan Chen, Tayden Li, Min Sun, Hsiao-Chun Huang, "Disentangling Experimental Noise from Fluorescent Microscopy Images with Multiple Cell Type", *Conference on Neural Information Processing Systems (NeurIPS) 2019 workshop*

Wei-Cheng Tseng, Po-Han Chi, Jia-Hua Wu, Min Sun, "Leveraging Sequence Embedding and Convolutional Neural Network for Protein Function Prediction", *Conference on Neural Information Processing Systems (NeurIPS) 2018 workshop*

RESEARCH AND WORK EXPERIENCE

Research Intern Oct 2024 - Present
Nvidia , advised by Yen-Chen Lin *Santa Clara, USA*
– (Pr1.) Perform policy evaluation with world model to accelerate the evaluation pipeline for manipulation policies

Graduate Research Assistant Sep 2022 - Present
University of Toronto, advised by Florian Shkurti *Ontario, Canada*
– (Pr1.) Granular material manipulation with gaussian splatting reconstruction and model predictive control
– (Pr2.) Applying knowledge distillation to extract compact visual feature from diverse foundation models to enhance throughput of manipulation policy

Teaching Assistant Sep 2022 - Present
University of Toronto *Ontario, Canada*
- CSC2626: Imitation Learning for Robotics,
- CSC477: Introduction to Mobile Robotics
- CSC148: Introduction to Computer Science
- CSC111: Foundations of Computer Science II
- CSC110: Foundations of Computer Science I

Remote Visiting Scholar Aug 2021 - Jan 2022
MIT, advised by Phillip Isola
- (Pr1.) Conducting research on offline reinforcement learning in multi-agent scenario by knowledge distillation to encourage agent perform cooperative behavior

Graduate Research Assistant Sep 2019 - Feb 2022
NTHU, advised by Min Sun *Hsinchu, Taiwan*
- (Pr1.) 3D reconstruction and novel-view synthesis on articulated object.
- (Pr2.) Performing transfer learning in reinforcement learning setup with policy decomposition.
- (Pr3.) Leveraging meta-learning approach to allow multi-agent policy adapt to scenario with unseen number of agent
- (Pr4.) Disentangling experimental noise from fluorescent microscopy image via metric learning

Engineering Intern July 2018 - Oct 2018
MediaTek *Hsinchu, Taiwan*
- (Pr1.) Integrated a variety of sensors to collect datasets for radar-related applications.
- (Pr2.) Constructed a demonstration system to verification AI processor
- (Pr3.) Developed a signal processing system to estimate the object distance

HONORS AND AWARDS

PhD Student Conference Travel Grant Dec 2022
Awarded to students with presentation in NeurIPS 2022, New Orleans, USA *UofT*

NovaTek Scholarship Aug 2021
Awarded to students with outstanding research ability *NovaTek*

The Phi Tau Phi Scholastic Honor Society Honorary Membership Apr 2021
Awarded to students with outstanding research ability *The Phi Tau Phi Scholastic Honor Society of ROC*

Dr. Mei Yi-Chi Memorial Prize June 2019
Highest honor *for newly graduated students at NTHU.* *NTHU*

Summer Oversea Experience Scholarship Mar 2016
*Only **ten** student in electrical engineering department.* *NTHU*

PROFESSIONAL SERVICE AND TECHNICAL SKILLS

Paper Review	ICLR 2025, ICRA 2025, NeurIPS 2024, CVPR 2024, NeurIPS 2023, ICML 2023
Packages	TensorFlow, PyTorch, Sci-kit Learn, Keras, Caffe
Computer Languages	C/C++, python, JavaScript/TypeScript, HTML, CSS, MATLAB
Hardware Development	FPGA, Ardunio, Verilog
Language	TOEFL (total: 102)