

# GUAN TING LIU

[dannyliu15@gmail.com](mailto:dannyliu15@gmail.com) · (+886)973-212-912

[Website](#) / [Google Scholar](#) / [LinkedIn](#) / [GitHub](#) / [FB](#)



## RESEARCH & PUBLICATION

1. **Guan-Ting Liu**, En-Pei Hu, Pu-Jen Cheng, Hung-yi Lee, Shao-Hua Sun. Hierarchical Programmatic Reinforcement Learning via Learning to Compose Programs. In *Proc. of the 40<sup>th</sup> International Conference on Machine Learning (ICML 2023)* (Top Conference, Acceptance Rate: 27.9% (1,827/6,538))
2. **Guan-Ting Liu**, Wei-Chen Tai, Yi-Ting Lin, Iris Hui-Ru Jiang, James P. Shiely, and Pu-Jen Cheng. Sub-Resolution Assist Feature Generation with Reinforcement Learning and Transfer Learning. In *Proc. of the 41<sup>st</sup> International Conference on Computer-Aided Design (ICCAD 2022)*, pp.1-9, 2022. (Top Conference, Acceptance Rate: 22.5% (132/586))
3. **Guan-Ting Liu**, Guan-Yu Lin, and Pu-Jen Cheng. Improving Generalization with Cross-State Behavior Matching in Deep Reinforcement Learning. In *Proc. of the 21<sup>st</sup> International Conference on Autonomous Agents and Multiagent Systems (AAMAS 2022)*, pp.1-3, 2022. (Top Conference, Acceptance Rate: 40.8% (257/629))
4. Yu-An Lin, Chen-Tao Lee, **Guan-Ting Liu**, Pu-Jen Cheng, Shao-Hua Sun. Addressing Long-Horizon Tasks by Integrating Program Synthesis and State Machines. Submitted to *International Conference on Learning Representations (ICLR 2024)* (Top Conference, Under Review)
5. Kevin Kai-Chun Chang, **Guan-Ting Liu**, Chun-Yao Chiang, Pei-Yu Lee, Iris Hui-Ru Jiang. Multi-Corner Timing Macro Modeling with Neural Collaborative Filtering from Recommendation Systems Perspective. Submitted to *IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems (TCAD)*(Top Journal, Under Review)
6. **Guan-Ting Liu**, Guan-Yu Lin, and Pu-Jen Cheng. Probabilistic Behavior Matching for Generalization in Deep Reinforcement Learning. *Machine Learning Journal* (Under Review).

## EDUCATION

SEP.2018 - NOW

### NATIONAL TAIWAN UNIVERSITY

- Ph.D. in Graduate Institute of Network and Multimedia (Professor: Pu-Jen Cheng) (4.167/4.30 GPA)
- TSMC PhD Scholarship Program (from 2021 to 2023)
- Student Representative (Dept. of GINM, NTU)
- Teaching Assistant (Reinforcement Learning, Fall 2023)
- Teaching Assistant (Web Retrieval and Mining, Spring 2020 and Spring 2021)

SEP. 2014 - JUN. 2018

### NATIONAL CHIAO TUNG UNIVERSITY

- B.S. in Electronics and Engineering (top 8%) (4.01/4.30 GPA)
- Excellent Work Award (top 20%) - 2016 Big Data Analytics for Semiconductor Manufacturing

## ACTIVITIES

- Student Representative of Graduate Institute of Network and Multimedia (2020-Now)
  - Attending institute assemblies and organizing recreation activities for students in GINM.
- Co-founder of NTU Ph.D. Student Club
  - Facilitating interaction between Ph.D. from different departments in NTU.