

Ting-Rui (Ray) Chiang

江廷睿

E-MAIL: tingruic@usc.edu

GITHUB: <https://github.com/CTinRay>

WEBSITE: <https://ctinray.github.io/>

Research Interests

Natural Language Processing, Machine Learning

Education

- 2022 - Now **University of Southern California**
Ph.D. of Computer Science
Advisor: Dani Yogatama
(Anticipated graduation date: May 2026)
- 2020 - 2022 **Carnegie Mellon University**
Master of Language Technology
- 2018 - 2020 **National Taiwan University**
Master of Computer Science and Information Engineering
Advisor: Yun-Nung (Vivian) Chen
- 2014 - 2018 **National Taiwan University**
Bachelor of Computer Science and Information Engineering

Working Experiences

- 2024 Applied Scientist Intern at Amazon Seattle (Host: Kevin Small)
- 2023 Summer Intern at Reka AI Inc. (Host: Mikel Artetxe)
- 2022 Applied Scientist Intern at Amazon Seattle (Host: Markus Dreyer)
- 2018 Summer Intern at Taiwan AI Labs
- 2017 Summer Intern at Academia Sinica

Teaching Experiences

- 2023 Teaching Assistant of CSCI-567 Machine Learning at USC
- 2022 Teaching Assistant of CS-11737 Multilingual NLP at CMU
- 2020,2019 Teaching Assistant of CSIE-5431 Applied Deep Learning at NTU
- 2017,2018 Teaching Assistant of CSIE-2311 Network/System Admin. at NTU

Publications

1. **Ting-Rui Chiang**, Can Liu, Markus Dreyer, Kevin Small, “Improving Informativeness for Retrieval Augmentation Generation via Reward Modeling,” under internal review.
2. **Ting-Rui Chiang**, Dani Yogatama, “Pelican Soup Framework: A Theoretical Framework for Language Model Capabilities,” under review.
3. **Ting-Rui Chiang**, Joshua Robinson, Xinyan Velocity Yu, Dani Yogatama, “LocateBench: Evaluating the Locating Ability of Vision Language Models,” under review.
4. **Ting-Rui Chiang**, Xinyan Velocity Yu, Joshua Robinson, Ollie Liu, Isabelle G Lee, Dani Yogatama, “On Retrieval Augmentation and the Limitations of Language Model Training,” in Proceedings of the 2024 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies ([NAACL 2024](#)).

5. **Ting-Rui Chiang**, Dani Yogatama, “The Distributional Hypothesis Does Not Fully Explain the Benefits of Masked Language Model Pretraining,” in *Proceedings of the 2023 Conference on Empirical Methods in Natural Language Processing (EMNLP 2023, full paper)*.
6. **Ting-Rui Chiang**, “On a Benefit of Mask Language Modeling: The Robustness to Simplicity Bias,” in *Proceedings of the 3rd Conference of the Asia-Pacific Chapter of the Association for Computational Linguistics and the 13th International Joint Conference on Natural Language Processing (IJCNLP-AAACL 2023, full paper, oral)*.
7. **Ting-Rui Chiang**, Yi-Pei Chen, Yi-Ting Yeh, and Graham Neubig, “Breaking Down Multilingual Machine Translation,” in *Findings of the Association for Computational Linguistics: ACL 2022 (ACL 2022, Findings, full paper)*.
8. Jessica Huynh, **Ting-Rui Chiang**, Jeffrey Bigham, Maxine Eskenazi, “DialCrowd 2.0: A Quality-Focused Dialog System Crowdsourcing Toolkit,” in *Proceedings of the Thirteenth Language Resources and Evaluation Conference (LREC 2022)*.
9. **Ting-Rui Chiang**, and Yun-Nung Chen, “Relating Neural Text Degeneration to Exposure Bias,” in *Proceedings of the Fourth BlackboxNLP Workshop on Analyzing and Interpreting Neural Networks for NLP (BlackboxNLP@EMNLP 2021)*.
10. **Ting-Rui Chiang**, and Yi-Ting Yeh, “Improving Dialogue State Tracking by Joint Slot Modeling,” in *Proceedings of the 3rd Workshop on Natural Language Processing for Conversational AI (NLP for ConvAI@EMNLP 2021)*.
11. **Ting-Rui Chiang***, Yi-Ting Yeh*, Ta-Chun Chi and Yao-Shian Wang, “Are you doing what I say? On modalities alignment in ALFRED,” in *Proceedings of the 1st Workshop on Novel Ideas in Learning-to-Learn through Interaction. (NILLI@EMNLP 2021)*.
12. **Ting-Rui Chiang**, Hao-Tong Ye and Yun-Nung Chen, “An Empirical Study of Content Understanding in Conversational Question Answering,” in *Proceedings of Thirty-Forth AAAI Conference on Artificial Intelligence (AAAI 2020, full paper, oral)*, New York, New York, USA, 2020.
13. **Ting-Rui Chiang** and Yun-Nung Chen, “Semantically-Aligned Equation Generation for Solving and Reasoning Math Word Problems,” in *Proceedings of The 17th Annual Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies (NAACL-HLT 2019, full paper, oral)*, Minneapolis, USA, June 2-7, 2019.
14. **Ting-Rui Chiang**, Chao-Wei Huang, Shang-Yu Su, Yun-Nung Chen, “Learning Multi-Level Information for Dialogue Response Selection by Highway Recurrent Transformer,” in *The 7th Dialog System Technology Challenge (DSTC7) in Proceedings of Thirty-Third AAAI Conference on Artificial Intelligence (AAAI 2019)*, Honolulu, Hawaii, USA, 2019.
15. **Ting-Rui Chiang***, Chao-Wei Huang*, Shang-Yu Su, Yun-Nung Chen, “RAP-Net: Recurrent Attention Pooling Networks for Dialogue Response Selection,” in *The 7th Dialog System Technology Challenge (DSTC7) in Proceedings of Thirty-Third AAAI Conference on Artificial Intelligence (AAAI 2019)*, Honolulu, Hawaii, USA, 2019.