Yi-Lin Tuan

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Education

• University of California, Santa Barbara

from Sep. 2019

Ph.D. in Computer Science Advisor: William Yang Wang

• National Taiwan University

Sep. 2013 - June. 2017

B.S. in Electrical Engineering

Advisors: Lin-shan Lee, Hung-yi Lee, Yun-Nung Chen

Conference Papers

- [1] **Yi-Lin Tuan**, Connor Pryor, Wenhu Chen, Lise Getoor, and William Yang Wang. "Local Explanation of Dialogue Response Generation". In: *NeurIPS2021* (2021).
- [2] **Yi-Lin Tuan**, Ahmed El-Kishky, Adi Renduchintala, Vishrav Chaudhary, Francisco Guzmán, and Lucia Specia. "Quality Estimation without Human-labeled Data". In: *EACL2021 (short paper)* (2021).
- [3] **Yi-Lin Tuan**, Yun-Nung Chen, and Hung-yi Lee. "DyKgChat: Benchmarking Dialogue Generation Grounding on Dynamic Knowledge Graphs". In: *EMNLP-IJCNLP* (long paper) (2019).
- [4] Feng-Guang Su*, Aliyah R Hsu*, **Yi-Lin Tuan**, and Hung-Yi Lee. "Personalized Dialogue Response Generation Learned from Monologues". In: *Interspeech* (2019).
- [5] Che-Ping Tsai*, **Yi-Lin Tuan***, and Lin-shan Lee. "Transcribing lyrics from commercial song audio: the first step towards singing content processing". In: *ICASSP*. 2018.

JORNAL ARTICLES

[6] **Yi-Lin Tuan** and Hung-Yi Lee. "Improving conditional sequence generative adversarial networks by stepwise evaluation". In: *IEEE/ACM Transactions on Audio, Speech, and Language Processing* 27.4 (2019), pp. 788–798.

Preprint and Under Review

- [7] Alon Albalak, Varun Embar, **Yi-Lin Tuan**, Lise Getoor, and William Yang Wang. "D-REX: Dialogue Relation Extraction with Explanations". In: *arXiv* preprint *arXiv*:2109.05126 (2021).
- [8] **Yi-Lin Tuan**, Wei Wei, and William Wang. "Knowledge Injection into Dialogue Generation via Language Models". In: arXiv preprint arXiv:2004.14614v2 (2021).
- [9] Zih-Yun Chiu, **Yi-Lin Tuan**, Hung-yi Lee, and Li-Chen Fu. "Parallelized Reverse Curriculum Generation". In: arXiv preprint arXiv:2108.02128 (2018).
- [10] **Yi-Lin Tuan***, Jinzhi Zhang*, Yujia Li, and Hung-yi Lee. "Proximal Policy Optimization and its Dynamic Version for Sequence Generation". In: arXiv preprint arXiv:1808.07982 (2018).

Experience

• Amazon Alexa Applied Science Intern

June 2021 - Sep. 2021

Advisors: Sajjad Beygi, Maryam Fazel-Zarandi, Qiaozi Gao, Alessandra Cervone

• Worked on natural language understanding in dialogue systems.

• Facebook Research Intern

June 2020 - Sep. 2020

Advisors: Ahmed El-Kishky, Adithya Renduchintala, Vishrav Chaudhary, Francisco Guzmán, Lucia Specia

- Worked on quality estimation of machine translation. Compared with work using human annotations, we can achieve comparable or even better quality estimation performance using data synthesis method [2].
- National Taiwan University Research Assistant

Sep. 2017 - Aug. 2019

Advisors: Hung-yi Lee, Yun-Nung Chen, Lin-shan Lee

- Worked on generative adversarial networks and reinforcement learning in conditional sequence generation for computational efficiency, optimization, and application. [6, 4, 10]
- Worked on temporal knowledge graph-grounded dialogue generation and collected needed conversational TV series data. [3]
- Worked on lyrics recognition and collected vocal-only songs data for transcribing tasks. [5]

Teaching Experience

• CommE 5045 in National Taiwan University Teaching Assistant

Spring 2017

• Tutored in adversarial learning, deep reinforcement learning and chit-chat chatbots.

Service

• Reviewer/Second Reviewer:

AAAI2021, IJCAI 2019, EMNLP 2019, EMNLP2018, ACL2018, TASLP, CSL, APSIPA

Talks

• Contributed talk "Dynamic Knowledge-Grounded Dialogue Generation through Walking on the Graph", SoCalNLP19

Awards & Honors

• Best Paper Award SAP, SoCalNLP19 [3]

Sep. 2019

- Outstanding Achievement Award (Innovate Asia Design Contest, Altera) Aug. 2016 Awarded for a designed FPGA mobile 3D projector.
- NTU Electrical Engineering 1960 Alumni Scholarship Awarded twice one-year scholarship.

2014 and 2016

• Presidential Award (rank 1/169), National Taiwan University

2014

Skills

- Programming Languages: Python, C/C++/C#, Shell Script, Matlab, System Verilog
- Tools: Pytorch, Tensorflow, Theano, Kaldi, Praat, Git, LATEX