

Wei Fang

PHD STUDENT AT MIT CSAIL

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Research Interests

Conversational NLP, natural language understanding, information extraction, information retrieval

Education

Massachusetts Institute of Technology (MIT)

PHD STUDENT

Cambridge, MA, USA

Aug. 2021 - PRESENT

- Computer Science & Artificial Intelligence Laboratory (CSAIL), Advisor: Dr. James Glass

Massachusetts Institute of Technology (MIT)

MASTER OF SCIENCE

Cambridge, MA, USA

Sep. 2018 - Aug. 2021

- Thesis: On End-to-end Automatic Fact-checking Systems, Advisor: Dr. James Glass

National Taiwan University (NTU)

BACHELOR OF SCIENCE IN ENGINEERING

Taipei, Taiwan

Sep. 2013 - Jan. 2018

- Department of Electrical Engineering, GPA: 4.16/4.3

Experience

MIT CSAIL Spoken Language Systems Group

RESEARCH ASSISTANT, SUPERVISED BY DR. JAMES GLASS

Cambridge, MA, USA

Sep. 2018 - PRESENT

- Working on passage retrieval reranking.
- Working on improving question generation for conversational question answering.
- **Temporal relation extraction** Worked on improving cross-document temporal relation extraction by anchoring on linked temporal events. [[Preprint](#)]
- **Automatic fact-checking** Worked on building the system [[NAACL-2019-Demo](#)] and stance detection with multi-task transfer learning [[EMNLP-2019-Workshop](#)].
- **Speech synthesis** Proposed method to improve end-to-end speech synthesis with pre-trained natural language representations. [[Preprint](#)]

Apple Inc. Natural Language Processing Team

RESEARCH INTERN

Cupertino, CA, USA

Jul. 2018 - Aug. 2018

- Researched on generative models for data augmentation.

NTU & Academia Sinica Vision & Learning Lab

UNDERGRADUATE RESEARCHER, SUPERVISED BY PROF. YU-CHIANG FRANK WANG

Taipei, Taiwan

Jul. 2016 - Jan. 2018

- Proposed a deep learning architecture that incorporates knowledge graphs for multi-label zero-shot recognition. [[CVPR-2018](#)]

Apple Inc. Natural Language Processing Team

RESEARCH INTERN

Cupertino, CA, USA

Jun. 2017 - Sep. 2017

- Researched on input representations for neural models to improve keyboard experience for users.

NTU Speech Processing & Machine Learning Lab

UNDERGRADUATE RESEARCHER, SUPERVISED BY PROF. LIN-SHAN LEE & PROF. HUNG-YI LEE

Taipei, Taiwan

Sep. 2015 - Jun. 2017

- Proposed a hierarchical attention-based model for the TOEFL Listening Comprehension Test by machine. [[SLT-2016](#)] [[TASLP-2019](#)]
- Researched on unsupervised audio word embeddings and helped develop a demo system.

Publications

- [1] **Wei Fang**, James Glass. “Cross-Document Temporal Relation Extraction with Temporal Anchoring Events”. *Preprint*, 2021. [[link](#)]

- [2] **Wei Fang**. “On End-to-end Automatic Fact-checking Systems”. *S.M. Thesis*, 2021. [\[link\]](#)
- [3] **Wei Fang**, Moin Nadeem, Mitra Mohtarami, James Glass. “Neural Multi-task Learning for Stance Prediction”. In *EMNLP-IJCNLP Workshop on Fact Extraction and VERification*, 2019. [\[link\]](#)
- [4] **Wei Fang**, Yu-An Chung, James Glass. “Towards Transfer Learning for End-to-end Speech Synthesis from Deep Pre-trained Language Models”. *arXiv*, 2019. [\[link\]](#)
- [5] Chia-Hsuan Lee, Hung-Yi Lee, Szu-Lin Wu, Chi-Liang Liu, **Wei Fang**, Jui-Yang Hsu, Bo-Hsiang Tseng. “Machine Comprehension of Spoken Content: TOEFL Listening Test and Spoken SQuAD”. In *IEEE/ACM Transactions on Audio, Speech, and Language Processing (TASLP)*, 2019. [\[link\]](#)
- [6] Moin Nadeem, **Wei Fang**, Brian Xu, Mitra Mohtarami, James Glass. “FAKTA: An Automatic End-to-End Fact Checking System”. In *Annual Conference of the North American Chapter of the Association for Computational Linguistics (NAACL)*, 2019. [\[link\]](#)
- [7] Chung-Wei Lee[†], **Wei Fang**[†], Chih-Kuan Yeh, Yu-Chiang Frank Wang. “Multi-Label Zero-Shot Learning with Structured Knowledge Graphs”. In *IEEE Conference on Computer Vision & Pattern Recognition (CVPR)*, 2018. [\[link\]](#)
- [8] **Wei Fang**[†], Jui-Yang Hsu[†], Hung-Yi Lee, Lin-Shan Lee. “Hierarchical Attention Model for Improved Comprehension of Spoken Content”. In *IEEE Workshop on Spoken Language Technology (SLT)*, 2016. [\[link\]](#)

[†] indicates equal contribution

Teaching

6.864 Advanced Natural Language Processing , Teaching Assistant	Spring 2021
EE5177/EE5184 Machine Learning , Teaching Assistant	Fall 2016, Spring 2017
CSIE5610 Data Analytics & Modeling , Teaching Assistant	Fall 2016
EE2011 Signals and Systems , Teaching Assistant	Spring 2016

Professional Activities

Reviewer ARR (2021-), ACL (2021, 2022), EMNLP (2021, 2022)

Honors & Awards

Student Travel Bursary , Amazon	Oct. 2019
EECS Great Educators Fellowship , MIT EECS	Feb. 2018
Dean's List (3 times) , NTU Electrical Engineering	Fall '14, Spring '15, Fall '16
Conference Grant , Foundation for the Advancement of Outstanding Scholarship	Dec. 2016

Skills

Languages	Python, C++, Shell scripting
Libraries/Toolkits	PyTorch
OS	GNU/Linux, Mac OSX
Other	Git, \LaTeX