# **Peifeng Wang**

Ph.D. Student, University of Southern California, US

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#### Research Interest

 Machine Common Sense (MCS), Question Answering (QA), Knowledge Graph (KG), Explainable Artificial Intelligence (XAI), Natural Language Generation (NLG), Natural Language Processing (NLP)

# **Academic History**

University of Southern California, Los Angeles, US

o Advisor: Prof. Xiang Ren, Prof. Muhao Chen,

Sun Yat-sen University, Ghuangzhou, China

o Advisor: Prof. Rong Pan

University of Illinois at Urbana-Champaign, Urbana, USA

o Advisor: Prof. Kevin Chen-Chuan Chang

Sun Yat-sen University, Ghuangzhou, China

o GPA: 3.8/4.0

Ph.D. in Computer Science

Aug. 2019 - 2023 (Expected)

M.S. in Computer Science

Sep. 2016 - Jun. 2019

Visiting Scholar Sep. 2018 - Jan. 2019

**B.S.** in Computer Science

Sep. 2012 - Jun. 2016

Los Angeles, USA

Sep. 2019 - Present

# **Employment History**

Meta FAIR Labs

New York, USA

Research Intern May 2023 - Present

o Managers: Dr. Maryam Fazel-Zarandi, Dr. Asli Celikyilmaz

Information Science Institution - USC

Research Assistant

Topic: Language-based Reasoning, Machine Common Sense
 Advisors: Prof. Xiang Ren, Prof. Muhao Chen

Amazon Search Palo Alto, USA

Research Intern May 2022 - Aug. 2022

o Topic: Faithful Chain-of-Thought Reasoning

o Managers: Dr. Zhengyang Wang, Dr. Zheng Li

Microsoft Azure AI Remote, USA

Research Intern May 2021 - Aug. 2021

o Topic: Knowledge-Enhanced Large Scale Language Model Pre-training

Manager: Dr. Dinghan Shen

**Tencent Al Lab**Research Intern, NLP Group
Shenzhen, China
Jun. 2018 - Sep. 2018

o Topic: Inductive Knowledge Representation Learning

Manager: Dr. Jialong Han

# **Publications ( Google Scholar Profile)**

#### SCOTT: Self-Consistent Chain-of-Thought Distillation

- o Peifeng Wang, Zhengyang Wang, Zheng Li, Yifan Gao, Bing Yin, Xiang Ren
- o ACL 2023

#### PINTO: Faithful Language Reasoning Using Prompt-Generated Rationales

- o Peifeng Wang, Aaron Chan, Filip Ilievski, Muhao Chen, Xiang Ren
- o ICLR 2023. A short version is accepted by TL4NLP and TSRML Workshop at NeurIPS, 2022

#### Contextualized Scene Imagination for Generative Commonsense Reasoning

- o Peifeng Wang, Jonathan Zamora, Junfeng Liu, Filip Ilievski, Muhao Chen, Xiang Ren
- o ICLR 2022

#### Do Language Model Perform Generalizable Commonsense Inference?

- o Peifeng Wang, Filip Ilievski, Muhao Chen, Xiang Ren
- ACL 2021 (Findings)

#### Learning to Deceive Knowledge Graph Augmented Models via Targeted Perturbation

- o Mrigank Raman, Siddhant Agarwal, **Peifeng Wang**, Aaron Chan, Hansen Wang, Sungchul Kim, Ryan Rossi, Handong Zhao, Nedim Lipka, Xiang Ren
- o ICLR 2021

#### Connecting the Dots: A Knowledgeable Path Generator for Commonsense Question Answering

- o Peifeng Wang, Nanyun Peng, Filip Ilievski, Pedro Szekely, Xiang Ren
- o EMNLP 2020 (Findings)

#### Scalable Multi-Hop Relational Reasoning for Knowledge-Aware Question Answering

- o Yanlin Feng, Xinyue Chen, Bill Yuchen Lin, Peifeng Wang, Jun Yan, Xiang Ren
- o EMNLP 2020

#### When Hearst Is not Enough: Improving Hypernymy Detection from Corpus with Distributional Models

- o Changlong Yu, Jialong Han, Peifeng Wang, Yangqiu Song, Hongming Zhang, Wilfred Ng and Shuming Shi
- o EMNLP 2020

#### Logic Attention Based Neighborhood Aggregation for Inductive Knowledge Graph Embedding

- o Peifeng Wang, Jialong Han, Chenliang Li, Rong Pan
- o AAAI 2019

#### Incorporating GAN for Negative Sampling in Knowledge Representation Learning

- Peifeng Wang, Shuangyin Li, Rong Pan
- o AAAI 2018

#### **Academic Activities**

- o Program Committee Member & Reviewer: ACL-23, AAAI-23, WSDM-23, EMNLP-22, etc.
- o Tutorial: Generalizable Commonsense Reasoning. AAAI 2023.
- Invited Talk: Generative Commonsense Reasoning. The Alan Turing Institute, 2021.

## Mentoring

- Jonathan Zamora (2022), Undergraduate Student at UCSD
- Junfeng Liu (2022), Master's Student at USC
- Mrigank Raman (2021), Undergraduate Student at IIT Delhi

### **Awards**

- o Annenberg Fellowship Award, University of Southern California, 2019.
- Excellent Student Scholarship, Sun Yat-sen University, 2018.
- o First Grade Scholarship, Sun Yat-sen University, 2016,2018.