# Weiqiu You

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http://fallcat.github.io/

# **Research Interests**

I build trustworthy machine learning models with faithful and verifiable explanations.

#### **Education**

Ph.D. Computer and Information Science, University of Pennsylvania, Philadelphia, PA

Advisor: Prof. Eric Wong

Expected Graduation: May. 2026

2018 – 2020 M.S. Computer Science, University of Massachusetts Amherst, Amherst, MA

Advisor: Prof. Mohit Iyyer

2014 – 2018 B.S. Computer Science and Mathematics, Gordon College, Wenham, MA

Advisor: Prof. Jonathan Senning, Prof. Russell Bjork

Double major. Honors Thesis title: Predict Media Interestingness.

# **Internship & Employment History**

Research Intern Okinawa Institute of Science and Technology. Okinawa, Japan.

2022 Research Intern IBM Research Yorktown Heights. Yorktown Heights, NY.

• **Research Assistant** University of Southern California, Information Sciences Institute. Los Angeles, CA.

2018 Research Intern NLP Center, Meituan-Dianping Inc. Beijing, China.

## **Publications**

#### Conferences and Journals

- Weiqiu You, Helen Qu, Marco Gatti, Bhuvnesh Jain, and Eric Wong (2025). "Sum-of-Parts: Self-Attributing Neural Networks with End-to-End Learning of Feature Groups". In: International Conference on Machine learning (ICML). URL: https://openreview.net/forum?id=r6y9TEdLMh.
- Chaehyeon Kim, **Weiqiu You**, Shreya Havaldar, and Eric Wong (2024). "Evaluating Groups of Features via Consistency, Contiguity, and Stability". In: *The Second Tiny Papers Track at ICLR 2024.* OURL: https://openreview.net/forum?id=IP2etbIEuC.
- Shreya Havaldar\*, **Weiqiu You**\*, Lyle Ungar, and Eric Wong (2023). "Visual Topics via Visual Vocabularies". In: *XAI in Action: Past, Present, and Future Applications.* OURL: https://openreview.net/forum?id=h60T5pzrGc.
- Youngja Park and **Weiqiu You** (Dec. 2023). "A Pretrained Language Model for Cyber Threat Intelligence". In: *Proceedings of the 2023 Conference on Empirical Methods in Natural Language Processing: Industry Track*. Singapore: Association for Computational Linguistics, pp. 113–122. ODOI: 10.18653/v1/2023.emnlp-industry.12.
- Li Zhang, Hainiu Xu, Yue Yang, Shuyan Zhou, **Weiqiu You**, Manni Arora, and Chris Callison-Burch (May 2023). "Causal Reasoning of Entities and Events in Procedural Texts". In: *Findings of the Association for Computational Linguistics: EACL 2023*. Dubrovnik, Croatia: Association for Computational Linguistics, pp. 415–431. ODOI: 10.18653/v1/2023.findings-eacl.31.

- Artemis Panagopoulou, Manni Arora, Li Zhang, Dimitri Cugini, **Weiqiu You**, Yue Yang, Liyang Zhou, Yuxuan Wang, Zhaoyi Hou, Alyssa Hwang, Lara Martin, Sherry Shi, Chris Callison-Burch, and Mark Yatskar (2022). "QuakerBot: A household dialog system powered by large language models". In: *Alexa Prize TaskBot Challenge 1 Proceedings*. **©** URL: https://www.amazon.science/alexa-prize/proceedings/quakerbot-a-household-dialog-system-powered-by-large-language-models.
- Thamme Gowda, **Weiqiu You**, Constantine Lignos, and Jonathan May (June 2021). "Macro-Average: Rare Types Are Important Too". In: *Proceedings of the 2021 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies*. Online: Association for Computational Linguistics, pp. 1138–1157. ODOI: 10.18653/v1/2021.naacl-main.90.
- Weiqiu You\*, Simeng Sun\*, and Mohit Iyyer (July 2020). "Hard-Coded Gaussian Attention for Neural Machine Translation". In: *Proceedings of the 58th Annual Meeting of the Association for Computational Linguistics*. Online: Association for Computational Linguistics, pp. 7689–7700. DOI: 10.18653/v1/2020.acl-main.687.

## **Preprints**

- Helen Jin\*, Anton Xue\*, **Weiqiu You**, Surbhi Goel, and Eric Wong (2025). *Probabilistic Stability Guarantees for Feature Attributions*. **OURL**: https://antonxue.github.io/files/papers/jin2025probabilistic.pdf.
- Siqi Zeng, Yifei He, **Weiqiu You**, Yifan Hao, Yao-Hung Hubert Tsai, Makoto Yamada, and Han Zhao (2025). Efficient Model Editing with Task Vector Bases: A Theoretical Framework and Scalable Approach. arXiv: 2502.01015 [cs.LG]. @ URL: https://arxiv.org/abs/2502.01015.
- Helen Jin, Shreya Havaldar, Chaehyeon Kim, Anton Xue, **Weiqiu You**, Helen Qu, Marco Gatti, Daniel A Hashimoto, Bhuvnesh Jain, Amin Madani, Masao Sako, Lyle Ungar, and Eric Wong (2024). *The FIX Benchmark: Extracting Features Interpretable to eXperts*. arXiv: 2409.13684 [cs.LG]. **O** URL: https://arxiv.org/abs/2409.13684.
- Weiqiu You and Youngja Park (2024). Cyber-Attack Technique Classification Using Two-Stage Trained Large Language Models. arXiv: 2411.18755 [cs.LG]. & url: https://arxiv.org/abs/2411.18755.

#### **Ongoing Works**

- 1 "Claim Verifications with Reasoning Attributions" (2024). Ongoing.
- <sup>2</sup> "Fast Leave-One-Out Feature Attribution" (2024). Ongoing.
- Helen Jin, **Weiqiu You**, and Eric Wong (2024). "Certifiably Robust Evaluation of Feature Attributions via Boolean Influences". Ongoing.
- 4 "Laparoscopic Cholecystectomy Safe-Guarded with Explanations" (2024). Ongoing.
- 5 "T-FIX: Textual Features Interpretable to eXperts" (2024). Ongoing.

# **Teaching Experience**

Computational Linguistics
 UPenn CIS530, Teaching Assistant, Spring 2021, Fall 2021

Spring 2020 • Advanced Natural Language Processing UMass COMPSCI685, Grader

<sup>\*</sup>Equal contribution.

# **Teaching Experience (continued)**

Spring 2018

Data Structures and Algorithms

Gordon CPS222, Teaching Assistant

Spring 2017

Calculus II

Gordon MAT122, Teaching Assistant

Fall 2016

Differential Equations

Gordon MAT225, Teaching Assistant

2016 - 2018

Biostatistics

Gordon, SPSS Help Session Tutor

**Calculus** 

Gordon, Tutor

## **Invitations**

2024

Panalist

Women in CS Panel, Computers and Society class. Gordon College, MA.

Speaker

Artificial Intelligence Week Alumni Forum. High School Affiliated to Renmin University of China, Beijing, China.

2022 Panalist

Women in CS Panel, Computers and Society class. Gordon College, MA.

## **Awards**

2024

AWS-AI ASSET Fellow.

2018

# **Academic Services**

2024 • ICLR.

Reviewer.

2022 – 2023 • ACL R

ACL Rolling Review.

Reviewer.

2023 • ACL.

Reviewer.

2022 CLunch, a weekly NLP research seminar run by PennNLP.

Organizer

2021 − 2023 **EMNLP**.

Reviewer.