Weiyan Shi

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wyshi.github.io Google Scholar

RESEARCH · Dialogue systems, especially social influence dialogue, e.g., persuasion

INTERESTS · Safety in NLP, e.g., privacy-preserving models

EDUCATION Columbia University 2020 - 2023 (anticipated)

Ph.D. in Computer Science

Advisor: Zhou Yu

University of California, Davis 2018 - 2020

Ph.D. in Computer Science (transferred out)

University of California, Berkeley 2015 - 2016

M.A. in Statistics

Renmin University of China 2011 - 2015

B.S. in Mathematics and Applied Mathematics

AWARDS & Best Paper Nomination, ACL 2019

HONORS Dean's Distinguished Ph.D. Fellowship 2018-2023

Department Citation (top 1), UC, Berkeley 2016 Speaker at Department Commencement (top 1), UC, Berkeley 2016

National Scholarship, RUC 2014
Presidential Fellowship for Studying Abroad, RUC 2013

PRIOR Research Intern, Facebook AI Research 2022.05 - 2022.09

POSITIONS *Host*: Jason Weston and Jing Xu

Project: Integrating user feedback into chatbots

Research Intern, Facebook AI Research 2021.05 - 2021.12

Host: Mike Lewis

Project: Zero-shot dialogue nonsense detection

Research Intern, Facebook AI Research 2020.06 - 2020.12

Host: Mike Lewis

Project: Strategic negotiation dialogue generation

Full-time Data Scientist, [24]7.ai 2016 - 2018

Customer service chatbot development

Publications The listed conferences are top-tier in NLP with acceptance rates between 20%-25%.

Selective Differential Privacy for Language Modeling

Weiyan Shi, Aiqi Cui, Evan Li, Ruoxi Jia, Zhou Yu

North American Chapter of the Association for Computational Linguistics (NAACL), 2022

Refine and Imitate: Reducing Repetition and Inconsistency in Persuasion Dialogues via Reinforcement Learning and Human Demonstration

Weiyan Shi, Yu Li, Saurav Sahay, Zhou Yu

Empirical Methods in Natural Language Processing (EMNLP) 2021 Findings

LEGOEval: An Open-Source Toolkit for Dialogue System Evaluation via Crowdsourcing

Yu Li, Josh Arnold, Feifan Yan, Weiyan Shi, Zhou Yu

Annual Meeting of the Association for Computational Linguistics (ACL) 2021 Demo

PRAL: A tailored pre-training model for task-oriented dialogue generation

Jing Gu, Qingyang Wu, Chongruo Wu, Weiyan Shi, Zhou Yu

Annual Meeting of the Association for Computational Linguistics (ACL) 2021

INSPIRED: Toward Sociable Recommendation Dialogue Systems

Shirley Anugrah Hayati, Dongyeop Kang, Qingxiaoyang Zhu, Weiyan Shi, Zhou Yu Empirical Methods in Natural Language Processing (EMNLP) 2020

Structured Attention for Unsupervised Dialogue Structure Induction

Liang Qiu, Yizhou Zhao, <u>Weiyan Shi,</u> Yuan Liang, Feng Shi, Tao Yuan, Zhou Yu, Song-Chun Zhu

Empirical Methods in Natural Language Processing (EMNLP) 2020

Understanding User Resistance Strategies in Persuasive Conversations

Youzhi Tian, Weiyan Shi, Chen Li, Zhou Yu

Empirical Methods in Natural Language Processing (EMNLP) 2020 Findings

Effects of Persuasive Dialogues: Testing Bot Identities and Inquiry Strategies

Weiyan Shi, Xuewei Wang, Yoo Jung Oh, Jingwen Zhang, Saurav Sahay, Zhou Yu Conference on Human Factors in Computing Systems (CHI) 2020

End-to-End Trainable Non-Collaborative Dialogue System

Yu Li, Kun Qian, Weiyan Shi, Zhou Yu

AAAI Conference on Artificial Intelligence (AAAI) 2020

How to Build User Simulators to Train RL-based Dialogue Systems

Weiyan Shi*, Kun Qian* (equal contribution), Xuewei Wang, Zhou Yu Empirical Methods in Natural Language Processing (EMNLP) 2019

Persuasion for Good: Towards a Personalized Persuasive Dialogue System for Social Good Best Paper Nomination

Xuewei Wang*, Weiyan Shi* (equal contribution), Richard Kim, Yoojung Oh, Sijia Yang, Jingwen Zhang, Zhou Yu

Annual Meeting of the Association for Computational Linguistics (ACL) 2019

Unsupervised Dialogue Structure Learning

Weiyan Shi, Tiancheng Zhao, Zhou Yu

North American Chapter of the Association for Computational Linguistics (NAACL) 2019

Sentiment Adaptive End-to-End Dialogue Systems

Weiyan Shi, Zhou Yu

Annual Meeting of the Association for Computational Linguistics (ACL) 2018

Preprints

Just Fine-tune Twice: Selective Differential Privacy for Large Language Models

Weiyan Shi, Si Chen, Chiyuan Zhang, Ruoxi Jia, Zhou Yu

arXiv, 2022

Seamlessly Integrating Factual Information and Social Content with Persuasive Dialogue

Maximillian Chen, <u>Weiyan Shi</u>, Feifan Yan, Ryan Hou, Jingwen Zhang, Saurav Sahay, Zhou Yu

arXiv, 2022

GRANTS Co-writer, "Selective Differential Privacy in Language Modeling", Cisco Research Grant, 2022-

2023. (PI: Zhou Yu)

TALKS Reducing Repetition and Contradiction in Dialogue Systems, Columbia NLP Seminar, Spring 2021

Selective Differential Privacy in Language Modeling, Columbia NLP Seminar, Fall 2021

Sentiment-adaptive Dialogue Systems, Cresta, Spring 2019

MENTORING Payton Guo 2022-Present

Undergraduate student New York University

Project: Dialogue data denoising

Ryan Shea 2022-Present

Master student Columbia University

Project: Membership inference attack on NLP models

Evan Li 2021

Undergraduate student Columbia University

Project: Differential privacy and attack models in NLP

Chelsea Cui 2021

Master student (Master at Columbia → Now at Amazon) Columbia University

Project: Differential privacy and dialogue simulation

Xuewei Wang 2019-2020

Undergraduate student (Master at CMU → Now at Meta)

Zhejiang University

Project: Persuasive dialogues and dialogue user simulator

Teaching Co-instructor: Conversational AI, Columbia University Fall 2022

Guest Lecturer: Natural Language Processing, Columbia University Spring 2022

Topic: Dialogue System

Teaching Assistant: Conversational AI, Columbia University Spring 2021

SERVICE Area Chair: 17th Women in Machine Learning Workshop (WiML 2022)

Publicity Chair: 4th Workshop for Conversational AI, ACL 2022

Program Commitee/Conference Reviewer:

ACL 2019, ACL 2020, *SEM 2020, ICLR 2021, AAAI 2021, EACL 2021, NAACL 2021, ACL 2021, *SEM 2021, NeurlPS 2021, EMNLP 2021, NLPCC 2021, ICLR 2022, AAAI 2022, ICML 2022, ACL 2022, CHI 2022, SIGDIAL 2022, HCI+NLP workshop at NAACL 2022, ACL Rolling Review 2021-2022

Journal Reviewer:

ACM Transactions on Human-Robot Interaction, Neurocomputing, ACM Transactions on Information Systems