Weiyan Shi

CONTACT

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Google Scholar

RESEARCH INTERESTS

· Dialog systems, especially strategic dialog systems, e.g., persuasive dialogs
· 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 & HONORS

Best Paper Nomination, ACL 2019
Dean's Distinguished Ph.D. Fellowship, UC, Davis 2018-2023
Department Citation in the Master's Program (top 1), UC, Berkeley 2016
MA Speaker at Department Commencement (top 1), UC, Berkeley 2016
National Scholarship, RUC 2014
Presidential Fellowship for Studying Abroad, RUC 2013

PRIOR POSITIONS

Research Intern, Facebook AI Research 2021.05 - 2021.12
Host: Mike Lewis
Project: Zero-shot dialog nonsense detection

Research Intern, Facebook AI Research 2020.06 - 2020.12
Host: Mike Lewis
Project: Strategic negotiation dialog 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 Dialog 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 dialog 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 Dialog Systems
Shirley Anugrah Hayati, Dongyeop Kang, Qingxiaoyang Zhu, Weiyan Shi, Zhou Yu
Empirical Methods in Natural Language Processing (EMNLP) 2020

Structured Attention for Unsupervised Dialog Structure Induction
Liang Qiu, Yizhou Zhao, Weiyan Shi, 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 Dialogs: 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 Dialog 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 Dialog 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 Dialog 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 Dialog Structure Learning
Weiyan Shi, Tiancheng Zhao, Zhou Yu
North American Chapter of the Association for Computational Linguistics (NAACL) 2019

Sentiment Adaptive End-to-End Dialog 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, Weiyan Shi, 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 Dialog Systems, Columbia NLP Seminar, Spring 2021
Selective Differential Privacy in Language Modeling, Columbia NLP Seminar, Fall 2021
Sentiment-adaptive Dialog Systems, Cresta, Spring 2019

MENTORING

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 model applications on NLP

Chelsea Cui 2021
Master student (Now at Amazon) Columbia University
Project: Differential privacy and dialog simulation

Xuewei Wang 2019-2020
Undergraduate student (Now at Meta) Zhejiang University
Project: Persuasive dialogs and dialog user simulator

TEACHING

Guest Lecturer: Natural Language Processing, Columbia University Spring 2022
Topic: Dialog System

Teaching Assistant: Conversational AI Special Topics, Columbia University Spring 2021

SERVICE

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, NeurIPS 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