Huan Sun

My research interests lie in natural language processing and data mining, with emphasis on question answering & natural language interfaces in general, text understanding, network analysis, and human behavior understanding. My work develops advanced computational methods that enable users to effortlessly query big data, write computer programs, collaborate with each other, and acquire knowledge for decision making in various domains, e.g., healthcare, education, and business.

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Education

Postdoc	Computer	Science and	Engineering
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01-06/2016 University of Washington

Advisor: Prof. Daniel S. Weld

Ph.D. Computer Science

2010-2015 University of California, Santa Barbara (UCSB)

Advisor: Prof. Xifeng Yan

Thesis: Mining Disparate Sources for Question Answering 2016 SIGKDD Ph.D. Dissertation Runner-Up Award

B.S. Electronic Engineering and Information Science

2006-2010 University of Science and Technology of China (USTC)

Excellent Graduation Thesis Award (top 5%)

Professional Experience

Assistant Professor, The Ohio State University (OSU)	09/2016 -
Consultant, Outreach, Seattle	2019 - 2020
Consultant, Fujitsu Laboratories of America	2017 - 2018
Consultant, Rulai, Campbell, CA	03-08/2017
Visiting Scholar, Baidu Research, Sunnyvale	09-12/2015
Summer Research Intern, Microsoft Research, Redmond	2014, 2015
Summer Research Intern, IBM Watson Research Center	2013
Research Intern, Microsoft Research Asia	2010

Honors & Awards

NSF CAREER Award	
Lumley Research Award, OSU	
2019 Google Faculty Research Award	
SIGKDD Ph.D. Dissertation Runner-Up Award	
Rising Star in EECS, MIT	
Outstanding Dissertation Award, Computer Science Department, UCSB	
Ph.D. Progress Award, Computer Science Department, UCSB	
Regents' Special Fellowship, UCSB	
Excellent Graduation Thesis Award (top 5%), USTC	
Guanghua Education Scholarship (first-class), USTC	
National Scholarship (top 2%), USTC	

Grants

- [1] **Huan Sun (Sole PI)**. Amazon Alexa Prize Taskbot Challenge, 06/2021-05/2022. **\$250,000**.
- [2] Huan Sun (Senior Personnel). NSF AI Institute, "AI Institute for Intelligent CyberInfrastructure with Computational Learning in the Environment (ICICLE)," 2021-2026. Around \$20 Million. (PI: Panda Dhabaleswar, OSU). Contribution: NLP, knowledge graphs, conversational AI.

- [3] Huan Sun (Co-PI). President's Research Excellence Grant, 2021-2022. \$50,000. In collaboration with Dr. Xiaoxue Wang (PI) and Dr. Xia Ning (Co-PI).
- [4] Huan Sun. National Science Foundation (NSF), "CAREER: Towards Interactive and Transparent Question Answering with Applications in the Clinical Domain," 06/2020-05/2025. **\$499,965**.
- [5] Huan Sun (Sole PI). Google, "The Interplay between Web Tables and Texts/KBs for Knowledge Extraction and Embedding," 03/2020. *\$48,485*.
- [6] Huan Sun (Sole PI). NSF, "III: Small: Towards Resolving Ad-hoc Concept Queries with Table Answers via Multi-source Data Mining," 08/2018-07/2022. **\$499,001**.
- [7] Huan Sun (Site PI). Patient-Centered Outcomes Research Institute (PCORI). "Unlocking Clinical Text in EMR by Query Refinement Using Both Knowledge Bases and Word Embedding," 01/2018-03/2022. \$1,060,000 (total); \$483,001 (my portion). In collaboration with Nationwide Children's Hospital (PI: Dr. Simon Lin, Primary Contact).
- [8] Huan Sun (Sole PI). Army Research Office (ARO), "Advancing Human and Machine Question Answering via Human-Machine Collaboration," 09/2017-04/2021. **\$498,526**.
- [9] Huan Sun (Sole PI). Fujitsu Lab of America, "Information Extraction for IoT Device APIs Based on Developer Documentation," 05/2017. \$50K.

Publications (*: My advisee; funded student; o: equal contribution)

After joining OSU:

- #: visiting/partly [1] Boyuan Pan^{#,°}, Yazheng Yang°, Cai Deng, **Huan Sun**, "TopNet: Learning from Neural Topic Model to Generate Long Stories," The 27th ACM SIGKDD Conference on Knowledge Discovery and Data Mining (SIGKDD 2021, research track, acceptance rate: $\sim 15.4\%$)
 - [2] Xiang Yue*,°, Minxin Du°, Tianhao Wang, Yaliang Li, **Huan Sun**, Sherman S. M. Chow, "Differential Privacy for Text Analytics via Natural Text Sanitization," Findings of the Joint Conference of the 59th Annual Meeting of the Association for Computational Linguistics and the 11th International Joint Conference on Natural Language Processing (Findings of ACL-IJCNLP 2021, long)
 - [3] Xiang Deng*, Ahmed Hassan Awadallah, Christopher Meek, Oleksandr Polozov, Huan Sun, Matthew Richardson, "Structure-Grounded Pretraining for Text-to-SQL," The 2021 Annual Conference of the North American Chapter of the Association for Computational Linguistics (NAACL-HLT 2021, long).
 - [4] Ziyu Yao*, Frank F. Xu, Pengcheng Yin, Huan Sun, Graham Neubig, "Learning Structural Edits via Incremental Tree Transformations," The Ninth International Conference on Learning Representations 2021 (ICLR'21).
 - [5] Xiang Deng*, Huan Sun, Alyssa Lees, You Wu, Cong Yu, "TURL: Table Understanding through Representation Learning," 47th International Conference on Very Large Data Bases (VLDB'21).
 - [6] Zhen Wang*, Bo Zong, Huan Sun, "Modeling Context Pair Interaction for Pairwise Tasks on Graphs," The 14th International Conference on Web Search and Data Mining (WSDM'21, acceptance rate: 18.6%).

- [7] Kaushik Mani*,°, Xiang Yue*,°, Bernal Jimenez Gutierrez, Yungui Huang, Simon Lin, **Huan Sun**, "Clinical Phrase Mining with Language Models," *IEEE International Conference on Bioinformatics and Biomedicine 2020 (BIBM'20, short)*.
- [8] Ziyu Yao*, Yiqi Tang, Wen-tau Yih, Huan Sun, Yu Su, "An Imitation Game for Learning Semantic Parsers from User Interaction," 2020 Conference on Empirical Methods in Natural Language Processing (EMNLP'20, long).
- [9] Bernhard Kratzwald[#], Stefan Feuerriegel, Huan Sun, "Learning a Cost-Effective Annotation Policy for Question Answering," 2020 Conference on Empirical Methods in Natural Language Processing (EMNLP'20, long).
- [10] Jie Zhao*, **Huan Sun**, "Adversarial Training for Code Retrieval with Question-Description Relevance Regularization," Findings of 2020 Conference on Empirical Methods in Natural Language Processing (Findings of EMNLP'20, long)[A new acceptance category of EMNLP; review scores: 4/4/4 with 5 being the highest].
- [11] Zhen Wang*, Jennifer Lee, Simon Lin, **Huan Sun**, "Rationalizing Medical Relation Prediction from Corpus-level Statistics," *Proceedings of the 58th Annual Meeting of the Association for Computational Linguistics (ACL'20, long).*
- [12] Xiang Yue*, Bernal Jimenez*, **Huan Sun**, "Clinical Reading Comprehension: A Thorough Analysis of the emrQA Dataset," *Proceedings of the 58th Annual Meeting of the Association for Computational Linguistics (ACL'20, long)*.
- [13] Jiankai Sun, Jie Zhao*, **Huan Sun**, Srinivasan Parthasarathy, "EndCold: An Endto-End Framework for Cold Question Routing in Community Question Answering Services," *The 29th International Joint Conference on Artificial Intelligence (IJ-CAI'20, acceptance rate: 12.6%).*
- [14] Xiang Yue*, Zhen Wang*, Jingong Huang*, Srinivasan Parthasarathy, Soheil Moosavinasab, Yungui Huang, Simon M. Lin, Wen Zhang, Ping Zhang, and Huan Sun, "Graph Embedding on Biomedical Networks: Methods, Applications, and Evaluations," Bioinformatics, Vol 36 Issue 4, 15 Feb 2020, Page 1241-1251.
- [15] Ziyu Yao*, Yu Su, Huan Sun, Wen-tau Yih, "Model-based Interactive Semantic Parsing: A Unified Formulation and A Text-to-SQL Case Study" Conf. on Empirical Methods in Natural Language Processing (EMNLP'19, long).
- [16] Xiang Deng*, Huan Sun, "Leveraging 2-hop Distant Supervision from Table Entity Pairs for Relation Extraction" Conf. on Empirical Methods in Natural Language Processing (EMNLP'19, long).
- [17] Zhen Wang*, Xiang Yue*, Seyed Soheil Moosavinasab, Yungui Huang, Simon Lin, **Huan Sun**, "SurfCon: Synonym Discovery on Privacy-Aware Clinical Data" The 25th ACM SIGKDD Conference on Knowledge Discovery and Data Mining (SIGKDD'19, acceptance rate: 14.2%).
- [18] Jie Zhao*, Ziyu Guan, Huan Sun, "Riker: Mining Rich Keyword Representations towards Explainable Product Question Answering" The 25th ACM SIGKDD Conference on Knowledge Discovery and Data Mining (SIGKDD'19, acceptance rate: 14.2%).
- [19] Boyuan Pan[#], Hao Li, Ziyu Yao*, Deng Cai, **Huan Sun**, "Reinforced Dynamic Reasoning for Conversational Question Generation"

 Proceedings of the 57th Annual Meeting of the Association for Computational Linquistics (ACL'19, long).
- [20] Ziyu Yao*, Jayavardhan Reddy Peddamail*, Huan Sun, "CoaCor: Code Annotation for Code Retrieval with Reinforcement Learning" The Web Conference (former WWW Conference) 2019 (acceptance rate: 18%).

- [21] Ziyu Yao*, Xiujun Li, Jianfeng Gao, Brian Sadler, **Huan Sun**, "Interactive Semantic Parsing for If-Then Recipes via Hierarchical Reinforcement Learning" The AAAI Conference on Artificial Intelligence (AAAI'19, acceptance rate: 16.2%).
- [22] Teng Xiao, Jiaxin Ren, Zaiqiao Meng, **Huan Sun**, Shangsong Liang, "Dynamic Bayesian Metric Learning for Personalized Product Search" Proceedings of the 28th ACM International Conference on Information and Knowledge Management (CIKM'19).
- [23] Long Chen, Ziyu Guan, Wei Zhao, Wanqing Zhao, Xiaopeng Wang, Zhou Zhao, Huan Sun, "Answer Identification from Product Reviews for User Questions by Multi-task Attentive Networks" The AAAI Conference on Artificial Intelligence (AAAI'19, acceptance rate: 16.2%).
- [24] Wei Zhao, Ziyu Guan, Yuhui Huang, Tingting Xi, Huan Sun, Zhiheng Wang and Xiaofei He, "Discerning Influence Patterns with Beta-Poisson Factorization in Microblogging Environments" IEEE Transactions on Knowledge and Data Engineering (TKDE) 2019.
- [25] Jayavardhan Reddy Peddamail*, Ziyu Yao*, Zhen Wang*, Huan Sun, "A Comprehensive Study of StaQC for Deep Code Summarization" SIGKDD 2018 Deep Learning Day.
- [26] Ziyu Yao*, Daniel S. Weld, Wei-Peng Chen, Huan Sun, "StaQC: A Systematically Mined Question-Code Dataset from Stack Overflow" The Web Conference (former WWW Conference) 2018.
- [27] Yu Su⁺, Honglei Liu⁺, Semih Yavuz, Izzeddin Gur, Huan Sun, Xifeng Yan. "Global Relation Embedding for Relation Extraction"

 The Annual Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies (NAACL-HLT'18, long). (+: Equal contribution)
- [28] Jie Zhao*, Yu Su, Ziyu Guan, **Huan Sun**, "An End-to-End Deep Framework for Answer Triggering with a Novel Group-Level Objective" Conf. on Empirical Methods in Natural Language Processing (EMNLP'17, short).
- [29] Yaliang Li, Nan Du, Chaochun Liu, Yusheng Xie, Wei Fan, Qi Li, Jing Gao, **Huan Sun**, "Reliable Medical Diagnosis from Crowdsourcing: Discover Trustworthy Answers from Non-Experts"

 The 10th ACM International Conference on Web Search and Data Mining (WSDM'17).
- [30] Yu Su, **Huan Sun**, Brian Sadler, Mudhakar Srivatsa, Izzeddin Gur, Zenghui Yan, Xifeng Yan, "On Generating Characteristic-rich Question Sets for QA Evaluation" Conf. on Empirical Methods in Natural Language Processing (EMNLP'16, long).
- [31] Chaochun Liu, **Huan Sun**, Nan Du, Shulong Tan, Hongliang Fei, Wei Fan, Tao Yang, Hao Wu, Yaliang Li, Chenwei Zhang, "Augmented LSTM Framework to Construct Medical Self-diagnosis Android"

 IEEE 16th International Conference on Data Mining (ICDM'16).

Before joining OSU:

- [32] **Huan Sun**, Hao Ma, Xiaodong He, Wen-tau Yih, Yu Su, Xifeng Yan, "Table Cell Search for Question Answering"

 The 25th International Conference on World Wide Web (WWW) 2016.
- [33] Yang Li, Shulong Tan, **Huan Sun**, Jiawei Han, Dan Roth, Xifeng Yan, "Entity Disambiguation with Linkless Knowledge Bases"

 The 25th International Conference on World Wide Web (WWW) 2016.

- [34] Fangqiu Han, Shulong Tan, Huan Sun, Xifeng Yan, Mudhakar Srivatsa, Deng Cai, "Distributed Representations of Expertise" SIAM International Conference on Data Mining (SDM), 2016.
- [35] **Huan Sun**, Hao Ma, Wen-tau Yih, Chen-Tse Tsai, Jingjing Liu, Ming-Wei Chang, "Open Domain Question Answering via Semantic Enrichment" The 24th International Conference on World Wide Web (WWW) 2015.
- [36] Yu Su, Shengqi Yang, **Huan Sun**, Mudhakar Srivatsa, Sue Kase, Michelle Vanni, Xifeng Yan, "Exploiting Relevance Feedback in Knowledge Graph Search" The 21st ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (SIGKDD) 2015.
- [37] Ziyu Guan, Shengqi Yang, **Huan Sun**, Mudhakar Srivatsa, Xifeng Yan, "Fine-Grained Knowledge Sharing in Collaborative Environments" *IEEE Transactions on Knowledge and Data Engineering (TKDE) 2015.*
- [38] **Huan Sun**, Mudhakar Srivatsa, Shulong Tan, Yang Li, Lance Kaplan, Shu Tao, Xifeng Yan, "Analyzing Expert Behaviors in Collaborative Networks" The 20th ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (SIGKDD) 2014.
- [39] Feida Zhu, Huan Sun, Xifeng Yan, "Network Mining and Analysis for Social Applications" The 20th ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (SIGKDD) 2014, Tutorial.
- [40] Shengqi Yang, Yinghui Wu, Huan Sun, Xifeng Yan, "Schemaless and Structureless Graph Querying" The 40th International Conference on Very Large Data Bases (VLDB) 2014.
- [41] Shengqi Yang, Yanan Xie, Yinghui Wu, Tianyu Wu, **Huan Sun**, Jian Wu, Xifeng Yan, "SLQ: A User-friendly Graph Querying System"

 ACM International Conference on Management of Data (SIGMOD) 2014, Demo.
- [42] **Huan Sun**, Mudhakar Srivatsa, Lance Kaplan, Xifeng Yan, "Analyzing Expert Behaviors in Collaborative Networks"

 International School and Conference on Network Science (NetSci) 2014.
- [43] Nan Li, Huan Sun, Kyle Chipman, Jemin George, Xifeng Yan, "A Probabilistic Approach to Uncovering Attributed Graph Anomalies" SIAM International Conference on Data Mining (SDM) 2014.
- [44] Huan Sun, Alex Morales, Xifeng Yan, "Synthetic Review Spamming and Immunization" The 19th ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (SIGKDD) 2013.
- [45] Shulong Tan, Yang Li, **Huan Sun**, Ziyu Guan, Xifeng Yan, Jiajun Bu, Chun Chen, Xiaofei He, "Interpreting the Public Sentiment Variations on Twitter"

 IEEE Transactions on Knowledge and Data Engineering (TKDE) 2014.
- [46] **Huan Sun**, Gengxin Miao, Xifeng Yan, "Noise-Resistant Bicluster Recognition" *IEEE 13th International Conference on Data Mining (ICDM) 2013.*
- [47] Alex Morales, Huan Sun, Xifeng Yan, "Synthetic Review Spamming and Immunization" The 22nd International Conference on World Wide Web (WWW) 2013, poster.
- [48] Huan Sun, Gengxin Miao, Yu S. Huang, Xifeng Yan, "Noise-Resistant Bicluster Recognition" The 17th Annual International Conference on Research in Computational Molecular Biology (RECOMB) 2013, poster.

Students Supervised/Mentored

Ph.D. Alumni:

- Ziyu Yao, Ph.D., AU2016-SU2021.
 - Awards: Presidential Fellowship; Graduate Student Research Award; Rising Stars in EECS (by UC Berkeley).
 - "On Advancing Natural Language Interfaces: Data Collection, Model Development, and User Interaction," *Dissertation*.
 - Now at George Mason (CS department) as a tenure-track assistant professor.
- Jie Zhao, Ph.D., AU2016-AU2020.
 - "Towards Building Trustworthy Automatic Question Answering Systems," Dissertation.
 - Now at Amazon (Alexa Shopping Team), Applied Scientist.

Current Ph.D. Students (Selected):

- Zhen Wang, AU2017-Now.
 - First-author Papers published in WSDM'21, ACL'20, SIGKDD'19.
 - Awards: Rising Stars in Data Science (by UChicago).
 - Summer Internships at Microsoft Research (Redmond), NEC labs.
- Xiang Yue, AU2018-Now.
 - First-author Papers published in ACL'20, Bioinformatics 2020 (ESI Highly Cited Paper: top 1% cited paper of its academic field).
 - 2021 Summer Internship at Tencent AI.
- Xiang Deng, AU2018-Now.
 - First-author Papers published in VLDB'21, NAACL'21, EMNLP'19.
 - Summer Internships at Microsoft Research (Redmond) and Amazon.

Master & Undergraduate Alumni:

- Xinliang "Frederick" Zhang, B.S., 2021, to join UMichigan (Ph.D. program in EECS).
 - Awards: Undergraduate Research Award; Honorable Mention of CRA Outstanding Undergraduate Researcher Award.
- Heming Sun, B.S., 2021, to join Univ. of Southern California (Master program in CS).
- Kaushik Mani, M.S., 2020, now at Oracle.
 - One short paper published in BIBM'20.
- Jayavardhan Reddy Peddamail, M.S., 2019, now at Google.
 - One first-author paper in KDD 2018 Deep Learning Day; One second-author paper in WWW 2019.
- Dushyanta Dhyani, M.S., 2018, now at Amazon.
 - Thesis: "Boosting Supervised Neural Relation Extraction with Distant Supervision"

Supported (Visiting) Students:

• Bortik Bandyopadhyay, Autumn 2018, Spring 2019, Advisor: Prof. Srinivasan Parthasarathy.

- Boyuan Pan, Nov 2018 May 2019.
 - Papers published in ACL 2019, SIGKDD 2021.
- Yuantong Li, Sep 2018 Jan 2019, now at Cornell University.

Before joining OSU:

- Alex Morales, Master student, 2012-2013, UCSB. Collaborator of my work published in SIGKDD 2013, "Synthetic Review Spamming and Defense." Now a Ph.D. student at Univ. of Illinois at Urbana Champaign (5-year fellowship).
- Sang Nguyen, Undergraduate student from Oxnard College, Summer 2012, UCSB. "Perceptron for Classification: Analysis and Application."

Teaching Experience

At OSU:

- Speech and Language Processing (CSE5525, Mixed Undergrad & Graduate Level) Instructor, Autumn 2021, OSU.
- Speech and Language Processing (CSE5525, Mixed Undergrad & Graduate Level)
 Instructor, Autumn 2020, OSU, Course Website.
- Natural Language Question Answering: Conversational, Interactive, Interpretable (CSE5539, Graduate Level)
 Instructor, Spring 2020, OSU.
- Introduction to Data Mining (CSE5243, Mixed Undergraduate & Graduate Level) Instructor, Autumn 2019, OSU, Course Website.
- Introduction to Data Mining (CSE5243, Mixed Undergraduate & Graduate Level) Instructor, Autumn 2018, OSU.
- Human-Machine Collaboration Mechanisms in Data Mining, Database, and AI (CSE5249, Graduate Level)
 Instructor, Spring 2018, OSU, Course Website.
- Introduction to Data Mining (CSE5243, Mixed Undergraduate & Graduate Level) Instructor, Autumn 2017, OSU.
- Natural Language Question Answering (CSE5539, Graduate Level) Instructor, Autumn 2016, OSU, Course Website.

Before joining OSU:

- Artificial Intelligence (CS165A) Guest lecturer, Winter 2012, UCSB
- Special Topics in CS: Information Management (CS290D) Guest lecturer, Spring 2014, UCSB

Invited Talks & **Tutorials**

- Nesh (startup), Texas AI community, Online, 07/2021 "Conversational AI to Democratize Data Science"
- Allen Institute for AI, Online, 07/2021 "Unleashing the Power of Pre-training on Tabular Data"
- Facebook AI Research, Online, 11/2020 "Towards Interactive and Adaptive Question Answering"
- UIUC, Online, 10/2020
 "Towards Interactive, Transparent, and Cost-Effective Question Answering with Applications in the Clinical Domain"

- Rulai (Startup), Online, 06/2020 "Interactive Semantic Parsing"
- Google Research, New York City, 02/2020
 "Table-based Natural Language Understanding"
- Facebook Conversational AI, Menlo Park, CA, 10/2019
 "Interactive Semantic Parsing and Question Answering"
- IEEE National Aerospace Electronics Conference (NAECON), Dayton, Ohio, 07/2019
 "Intelligent Collaboration among Humans and Machines (from Natural Language Understanding Perspective)"
- OSU-Tsukuba Joint Linguistics Workshop, Columbus, Ohio, 02/2019 "Intelligent Collaboration among Humans and Machines (from Natural Language Understanding Perspective)"
- Army Science Planning and Strategy Meeting, Austin, Texas, 01/2019
 "Intelligent Collaboration among Humans and Machines (from Natural Language Understanding Perspective)"
- City Brain Project, Hangzhou, China, 07/2018
 "The Quest for Knowledge: Quest. Answering beyond Knowledge Bases and Texts"
- Fudan University, 07/2018
 "The Quest for Knowledge: Quest. Answering beyond Knowledge Bases and Texts"
- Tsinghua Unversity, 06/2018
 "The Quest for Knowledge: Quest. Answering beyond Knowledge Bases and Texts"
- UMass Amherst, 02/2018
 "The Quest for Knowledge: Quest. Answering beyond Knowledge Bases and Texts"
- Rice University, 02/2018
 "The Quest for Knowledge: Quest. Answering beyond Knowledge Bases and Texts"
- University of Illinois, Chicago, 01/2018
 "The Quest for Knowledge: Quest. Answering beyond Knowledge Bases and Texts"
- Penn State University, 01/2018
 "The Quest for Knowledge: Quest. Answering beyond Knowledge Bases and Texts"
- Fujitsu Laboratories of America, 06/2017
 "Mining Big Data to Build Intelligent Systems"
- University of Science and Technology of China, Hefei, 01/2017
 "Mining Disparate Sources for Question Answering"
- Baidu Research, Sunnyvale, 09/2015
 "Network Centric Information Search and Question Answering"
- University of Washington, 08/2015 "Collaborative and Intelligent Query Resolution"
- Army Research Lab, Silver Spring, 05/2015
 "Knowledge Enhanced Information Search and Text Understanding"
- The Ohio State University, 03/2015 "Collaborative and Intelligent Query Resolution"
- Simon Fraser University, 03/2015
 "Collaborative and Intelligent Query Resolution"
- ShanghaiTech University, China, 09/2014 "Data Mining for General Problem Solving: Methodology and Analysis"
- Tutorial @ SIGKDD, 08/2014
 "Network Mining and Analysis for Social Applications"

Outreach Activities (Selected)

- Faculty mentor, OSU LSAMP program (which aims to diversify the STEM workforce by increasing underrepresented minorities in STEM degrees), 2020-2021
- Guest speaker, ENGR 1195.02 Women in Engineering (WiE) Seminar Class, 09/2019
- Meeting with female students at Women in Engineering (WiE) Cafe, 08/2019
- Faculty mentor, OSU LSAMP program (which aims to diversify the STEM workforce by increasing underrepresented minorities in STEM degrees), 2019-2020
- Hosting two high school summer interns (help hire underrepresented groups from Columbus City College), 06-08/2018
 - Sounak Dey: Thomas Worthington High School
 - Jacob Mayhew: St. Charles Preparatory School
- Served as Judge in AI Club hackathon at Ohio State, 04/2018 Event theme: Weekend-long challenge on AI related projects Participants: *Undergraduate/graduate students*.
- Enrolled in the 2018 Metro Early College High School Internship program, 10/2017 Program goal: To host high school interns in Summer 2018.
- Served as Judge in ASA DataFest at Ohio State, 05/2017
 Event theme: Weekend-long challenge on data science related projects
 Participants: Undergraduate students from 5 colleges.
- Invited speaker at the OSU Innovation Summit, 05/2017

 "Mining Big Data to Build Intelligent Assistants Who Can Speak Natural Language"

 Event theme: Innovation and disruption in the next digital age

 Audience: Entrepreneurial-minded leaders, academics & students.
- Invited speaker at High School I/O (the first high school hackathon), 04/2017 "How to Build Intelligent Assistants Who Can Speak Natural Language" Audience: *High school students from Central Ohio*.
- Attendee of the 2017 Ohio Celebration of Women in Computing (OCWiC), 02/2017 Event theme: Engaging and empowering Ohio women in computing.
- Invited speaker at Center of Science and Industry (COSI), 10/2016 "Data Mining and To Be a Data Miner"

 Audience: Underrepresented high school students from Central Ohio.

Academic Services

Chair Positions:

- 2021: NAACL (Area Chair), NLP4Prog Workshop Co-chair, NLPCC (Area Char), ACL (Birds of a Feather Session Chair)
- 2020: NLI Workshop Co-chair
- 2019: SDM (publicity co-chair, session chair), SIGKDD (session chair)

Review Editor:

• 2018: Frontiers in Big Data and AI (Journal, Data Mining and Management Section)

PC Member:

- 2021: NAACL, TACL, EMNLP, ACL Rolling Review
- 2020: SIGKDD, ACL, EMNLP
- 2019: SDM, NAACL, SIGKDD, EMNLP-MRQA
- 2018: ACL, ICDM, CoNLL

- 2017: SIGKDD, ACL, EMNLP, WWW, CIKM (senior PC), IJCNLP, IJCAI BOOM workshop
- 2016: SIGKDD, EMNLP, ICDM, CIKM, BigMine, IJCAI BOOM workshop

Journal Reviewer:

- Transactions on Audio, Speech and Language Processing, since 2021
- ACM Transactions on Knowledge Discovery from Data (TKDD), since 2016
- IEEE Transactions on Knowledge and Data Engineering (TKDE), since 2015

Conference External Reviewer:

• WWW 2015, ICDM (2012-2013), ICDE 2011