# Yu Su

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## Education

**University of California, Santa Barbara**                                      *Santa Barbara, CA, USA*

PH.D. IN COMPUTER SCIENCE                                                         *2012 - 2018*

- Advisor: Xifeng Yan
- Dissertation: *Towards Democratizing Data Science with Natural Language Interfaces*
- *Outstanding Dissertation Award*

**Tsinghua University**                                                          *Beijing, China*

B.ENG. IN COMPUTER SCIENCE AND TECHNOLOGY                                        *2008 - 2012*

- *Outstanding Freshman & Outstanding Graduate Awards*

## Professional Experience

**Department of Computer Science & Engineering, The Ohio State University**       *Columbus, OH, USA*

DISTINGUISHED ASSISTANT PROFESSOR OF ENGINEERING INCLUSIVE EXCELLENCE             *2020 - Present*
LEAD OF FOUNDATIONAL AI, ICICLE AI INSTITUTE
LEAD OF MACHINE LEARNING FOUNDATIONS, IMAGEOMICS INSTITUTE

**Microsoft Semantic Machines**                                                  *Berkeley, CA, USA*

SENIOR RESEARCHER                                                                *2018 - 2024*

**Department of Computer Science & Engineering, The Ohio State University**       *Columbus, OH, USA*

VISITING ASSISTANT PROFESSOR                                                      *2018 - 2019*

## Honors & Awards

| | | |
|---|---|---|
| 2025 | Alfred P. Sloan Research Fellowship | *Alfred P. Sloan Foundation* |
| 2024 | Best Student Paper Award (in recognition of BioCLIP) | *CVPR* |
| 2024 | Best Paper Finalist (in recognition of MMMU) | *CVPR* |
| 2024 | Cisco Faculty Award | *Cisco* |
| 2024 | Apple Seed Grant Funding Award | *Apple* |
| 2024 | Outstanding Area Chair | *EMNLP* |
| 2023 | Outstanding Paper Award | *ACL* |
| 2023 | Lumley Research Award | *OSU* |
| 2022 | Outstanding Paper Award | *COLING* |
| 2022 | Distinguished Assistant Professorship of Engineering Inclusive Excellence | *OSU* |
| 2022 | Third-Place Honor, Inaugural Alexa Prize TaskBot Challenge | *Amazon* |
| 2019 | Outstanding Dissertation Award | *UCSB* |
| 2018 | Best Distinguished Graduate Student Lecture | *UCSB* |
| 2012 | Outstanding Graduate Award | *Tsinghua University* |

## Teaching

| | | |
|---|---|---|
| AU24 | (SEI=4.78/5) CSE6521: Artificial Intelligence (G) | *OSU* |
| AU23 | (SEI=4.62/5) CSE6521: Artificial Intelligence (G) | *OSU* |
| AU22 | CSE5889: Experiential Introduction to Imageomics (G) | *OSU* |
| AU22 | (SEI=4.57/5) CSE6521: Artificial Intelligence (G) | *OSU* |
| SP22 | (SEI=4.13/5) CSE5525: Foundations of Speech and Language Processing (U/G) | *OSU* |

| AU21 | (SEI=4.22/5) CSE6521: Artificial Intelligence (G) | *OSU* |
| AU20 | (SEI=4.75/5) CSE5539: Cutting-Edge Topics in Natural Language Processing (U/G) | *OSU* |
| SP20 | (SEI=4.61/5) CSE5243: Introduction to Data Mining (U/G) | *OSU* |

## Grants

Since joining OSU in 2020, I have obtained 19 funded projects (16 of which as PI or Co-PI), totaling over $42M, with approximately $4.2M for my share. In addition to foundational AI research, I also actively participate in large multi-disciplinary endeavors and serve in leadership roles, including as lead of Foundational AI in the NSF AI Institute - ICICLE and lead of Machine Learning Foundations in the NSF HDR Institute - Imageomics.

[19] **Alfred P. Sloan Research Fellowship**
Role: Sole PI. Gift: $75,000. 2025-2027.

[18] **Gift from Cisco**
Role: Sole PI. Gift: $86,000. 2024.

[17] **Gift from Apple**
Role: Sole PI. Gift: $25,000. 2024.

[16] **Gift from Amazon**
Role: PI. Co-PI: Huan Sun. Gift: $704,000. My share: $352,000. 2024.

[15] **Gift from Orby AI**
Role: Sole PI. Gift: $200,000. 2024.

[14] **NIH CCTS Element E: Unleashing the Potential of Large Language Models for Clinical and Translational Science: Application to Addressing Unmet Social Needs of Patients**
Role: Co-PI. Grant: $370,968. My share: $98,377. 2024-2026.

[13] **Cisco: *Grounding Language Models to Real-World Environments***
Role: Sole PI. Grant: $175,000. 2023-2024.

[12] **NIH R01: *Machine Learning Drives Translational Drug Interaction and Pharmacogenetics Research***
Role: MPI (w/ Lang Li and You Chen). Grant: $3,118,680. 2023-2027. *Impact Score from Review Panel: 10, top 1%*.

[11] **OSU Internal Grant for Large Langauge Model Research**
Role: PI. Grant: $150,000. 2023-2025.

[10] **Army Research Lab: *Knowledge-based Cumulative and Efficient Task Learning of Intelligent Agents***
Role: Sole PI. Grant: $464,230. 2022-2025.

[9] **Cisco: *Transformer-based Graph Neural Networks for Knowledge Graph Reasoning at Scale***
Role: Sole PI. Grant: $199,876. 2022-2023.

[8] **Cisco: *Building Transparent Interactive Natural Language Interfaces to Databases***
Role: Co-PI. PI: Huan Sun. Grant: $199,976. My share: $64,184. 2022-2023.

[7] **Walmart: *Product Question Answering for Walmart Online Shopping***
Role: Sole PI. Grant: $120,109. 2022-2023.

[6] **Amazon: *Alexa Prize Simbot Challenge***
Role: Sole PI. Grant: $250,000. 2022-2023.

[5] **NSF National AI Research Institute: *ICICLE: Intelligent CyberInfrastructure with Computational Learning in the Environment***
Role: Senior Personnel (*Lead of Foundational AI*). PI: Dhabaleswar K. Panda. Grant: $19,999,998. My share: approximately $450,000. 2021-2026.

[4] **NSF HDR Institute:** *Imageomics: A New Frontier of Biological Information Powered by Knowledge-guided Machine Learning*
Role: Senior Personnel (*Lead of ML Foundations*). PI: Tanya Berger-Wolf. Grant: $14,969,077. My share: approximately $800,000. 2021-2026.

[3] **NSF Convergence Accelerator:** *Actionable Sensemaking Tools for Curating and Authenticating Information in the Presence of Misinformation during Crises*
Role: Senior Personnel. PI: Srinivasan Parthasarathy. Grant: $749,997. 2021-2022.

[2] **OSU TDAI Research Pilot Grant:** *Practical and Comprehensive Social Media Pharmacovigilance*
Role: Sole PI. Grant: $50,000. 2021-2022.

[1] **Gift from Fujitsu Lab of America**
Role: Sole PI. Gift: $50,000. 2020.

# Publications

I have published 87 refereed articles, including 75 conference, 6 journal, and 6 workshop articles. 64 of the conference publications appear in top conferences per csrankings.org including EMNLP (18), ACL (13), ICLR (9), NeurIPS (7), CVPR (4), NAACL (4), ICML (3), WWW (2), SIGKDD (1), ICCV (1), SIGIR (1), and AAAI (1). As of Feb. 21, 2025, my work has received 5,906 citations. My h-index is 36.

[+]: My advisee at OSU. [#]: My intern at Microsoft

## SELECTED RECENT HIGHLIGHTS

[14] **Navigating the Digital World as Humans Do: Universal Visual Grounding for GUI Agents**
Boyu Gou[+], Ruohan Wang[+], Boyuan Zheng[+], Yanan Xie, Cheng Chang, Yiheng Shu[+], Huan Sun, Yu Su.
International Conference on Learning Representations (**ICLR**), 2025
**Oral (207/11,672=1.8%)**

[13] **HippoRAG: Neurobiologically Inspired Long-Term Memory for Large Language Models**
Bernal Jiménez Gutiérrez[+], Yiheng Shu[+], Yu Gu[+], Michihiro Yasunaga, Yu Su.
Conference on Neural Information Processing Systems (**NeurIPS**), 2024
**GitHub Stars: 1.6K**

[12] **Grokked Transformers are Implicit Reasoners: A Mechanistic Journey to the Edge of Generalization**
Boshi Wang, Xiang Yue, Yu Su, Huan Sun.
Conference on Neural Information Processing Systems (**NeurIPS**), 2024

[11] **MagicLens: Self-Supervised Image Retrieval with Open-Ended Instructions**
Kai Zhang[+], Yi Luan, Hexiang Hu, Kenton Lee, Siyuan Qiao, Wenhu Chen, Yu Su, Ming-Wei Chang.
International Conference on Machine Learning (**ICML**), 2024
**Oral (144/9,473=1.5%)**

[10] **TravelPlanner: A Benchmark for Real-World Planning with Language Agents**
Jian Xie[+], Kai Zhang[+], Jiangjie Chen, Tinghui Zhu, Renze Lou, Yuandong Tian, Yanghua Xiao, Yu Su.
International Conference on Machine Learning (**ICML**), 2024
**Spotlight (335/9,473=3.5%), Data Downloads (Hugging Face): 108K**

[9] **GPT-4V(ision) is a Generalist Web Agent, if Grounded**
Boyuan Zheng[+], Boyu Gou[+], Jihyung Kil, Huan Sun, Yu Su.
International Conference on Machine Learning (**ICML**), 2024
**GitHub Stars: 711, a popular tool used by many AI agent startups**

[8] **BioCLIP: A Vision Foundation Model for the Tree of Life**
Samuel Stevens[+]*, Jiaman Wu[+], Matthew J Thompson, Elizabeth G Campolongo, Chan Hee Song[+], David Edward Carlyn, Li Dong, Wasila M Dahdul, Charles Stewart, Tanya Berger-Wolf, Wei-Lun Chao, Yu Su*.
Conference on Computer Vision and Pattern Recognition (**CVPR**), 2024 (*: corresponding authors)
**Best Student Paper Award (4/11,532=0.03%), Model Downloads (Hugging Face): 467K**

[7] **MMMU: A Massive Multi-discipline Multimodal Understanding and Reasoning Benchmark for Expert AGI**
Xiang Yue*, Yuansheng Ni, Kai Zhang[+], Tianyu Zheng, Ruoqi Liu, Ge Zhang, Samuel Stevens[+], Dongfu Jiang, Weiming Ren, Yuxuan Sun, Cong Wei, Botao Yu, Ruibin Yuan, Renliang Sun, Ming Yin, Boyuan Zheng[+], Zhenzhu Yang, Yibo Liu, Wenhao Huang, Huan Sun, Yu Su*, Wenhu Chen*.
Conference on Computer Vision and Pattern Recognition (**CVPR**), 2024 (*: corresponding authors)
**Best Paper Finalist (24/11,532=0.2%), Top 3 Most Cited Papers at CVPR'24**
**Data Downloads (Hugging Face): 1.4M, a standard benchmark for multimodal LLMs**

[6] *Adaptive Chameleon or Stubborn Sloth*: **Revealing the Behavior of Large Language Models in Knowledge Conflicts**
Jian Xie[+], Kai Zhang[+], Jiangjie Chen, Renze Lou, Yu Su.
International Conference on Learning Representations (**ICLR**), 2024
**Spotlight (366/7,262=5%)**

[5] **MAmmoTH: Building Math Generalist Models through Hybrid Instruction Tuning**
Xiang Yue, Xingwei Qu, Ge Zhang, Yao Fu, Wenhao Huang, Huan Sun, Yu Su, Wenhu Chen.
International Conference on Learning Representations (**ICLR**), 2024
**Spotlight (366/7,262=5%)**

[4] **Mind2Web: Towards a Generalist Agent for the Web**
Xiang Deng, Yu Gu[+], Boyuan Zheng[+], Shijie Chen[+], Samuel Stevens[+], Boshi Wang, Huan Sun, Yu Su.
In the Conference on Neural Information Processing Systems (**NeurIPS**), Datasets and Benchmarks Track, 2023
**Spotlight (32/987=3%), GitHub Stars: 781**
**One of the first and most widely used benchmarks for web agents**

[3] **LLM-Planner: Few-Shot Grounded Planning for Embodied Agents with Large Language Models**
Chan Hee Song[+], Jiaman Wu[+], Clayton Washington[+], Brian M. Sadler, Wei-Lun Chao, Yu Su
International Conference on Computer Vision (**ICCV**), 2023
**Top 15 Most Cited Papers at ICCV'23**

[2] *Don't Generate, Discriminate*: **A Proposal for Grounding Language Models to Real-World Environments**
Yu Gu[+], Xiang Deng, Yu Su
Annual Conference of the Association for Computational Linguistics (**ACL**), 2023
**Outstanding Paper Award**

[1] **ArcaneQA: Dynamic Program Induction and Contextualized Encoding for Knowledge Base Question Answering**
Yu Gu[+] and Yu Su
International Conference on Computational Linguistics (**COLING**), 2022
**Outstanding Paper Award**

## OTHER CONFERENCE PAPERS

[61] **Attention in Large Language Models Yields Efficient Zero-Shot Re-Rankers**
Shijie Chen[+], Bernal Jiménez Gutiérrez[+], Yu Su
International Conference on Learning Representations (**ICLR**), 2025

[60] **ScienceAgentBench: Toward Rigorous Assessment of Language Agents for Data-Driven Scientific Discovery**
Ziru Chen, Shijie Chen[+], Yuting Ning[+], Qianheng Zhang, Boshi Wang, Botao Yu, Yifei Li, Zeyi Liao, Chen Wei, Zitong Lu, Vishal Dey, Mingyi Xue, Frazier N. Baker, Benjamin Burns, Daniel Adu-Ampratwum, Xuhui Huang, Xia Ning, Song Gao, Yu Su, Huan Sun
International Conference on Learning Representations (**ICLR**), 2025

[59] **VisualAgentBench: Towards Large Multimodal Models as Visual Foundation Agents**
Xiao Liu, Tianjie Zhang, Yu Gu[+], Iat Long Iong, Yifan Xu, Xixuan Song, Shudan Zhang, Hanyu Lai, Xinyi Liu, Hanlin Zhao, Jiadai Sun, Xinyue Yang, Yu Yang, Zehan Qi, Shuntian Yao, Xueqiao Sun, Siyi Cheng, Qinkai Zheng, Hao Yu, Hanchen Zhang, Wenyi Hong, Ming Ding, Lihang Pan, Xiaotao Gu, Aohan Zeng, Zhengxiao Du, Chan Hee Song[+], Yu Su, Yuxiao Dong, Jie Tang
International Conference on Learning Representations (**ICLR**), 2025

[58] **MICE for CATs: Model-Internal Confidence Estimation for Calibrating Agents with Tools**
Nishant Subramani, Jason Eisner, Justin Svegliato, Benjamin Van Durme, Yu Su, Sam Thomson
Annual Conference of the Nations of the Americas Chapter of the Association for Computational Linguistics
(**NAACL**), 2025

[57] **Fine-Tuning is Fine, if Calibrated**
Zheda Mai, Arpita Chowdhury, Ping Zhang, Cheng-Hao Tu, Hong-You Chen, Vardaan Pahuja[+], Tanya Berger-Wolf,
Song Gao, Charles Stewart, Yu Su, Wei-Lun Chao
Conference on Neural Information Processing Systems (**NeurIPS**), 2024

[56] **VLM4Bio: A Benchmark Dataset to Evaluate Pretrained Vision-Language Models for Trait Discovery from Biological Images**
M Maruf, Arka Daw, Kazi Sajeed Mehrab, Harish Babu Manogaran, Abhilash Neog, Medha Sawhney, Mridul
Khurana, James P Balhoff, Yasin Bakis, Bahadir Altintas, Matthew J Thompson, Elizabeth G Campolongo, Josef C
Uyeda, Hilmar Lapp, Henry L Bart, Paula M Mabee, Yu Su, Wei-Lun Chao, Charles Stewart, Tanya Berger-Wolf,
Wasila Dahdul, Anuj Karpatne
Conference on Neural Information Processing Systems (**NeurIPS**), Datasets and Benchmarks Track, 2024

[55] **Middleware for LLMs: Tools are Instrumental for Language Agents in Complex Environments**
Yu Gu[+], Yiheng Shu[+], Hao Yu, Xiao Liu, Yuxiao Dong, Jie Tang, Jayanth Srinivasa, Hugo Latapie, Yu Su.
Conference on Empirical Methods in Natural Language Processing (**EMNLP**), 2024

[54] **Reviving the Context: Camera Trap Species Classification as Link Prediction on Multimodal Knowledge Graphs**
Vardaan Pahuja[+], Weidi Luo[+], Yu Gu[+], Cheng-Hao Tu, Hong-You Chen, Tanya Berger-Wolf, Charles Stewart, Song
Gao, Wei-Lun Chao, Yu Su.
ACM International Conference on Information and Knowledge Management (**CIKM**), 2024

[53] **Deductive Beam Search: Decoding Deducible Rationale for Chain-of-Thought Reasoning**
Tinghui Zhu[+], Kai Zhang[+], Jian Xie[+], Yu Su.
Conference on Language Modeling (**COLM**), 2024

[52] **LLMs in the Imaginarium: Tool Learning through Simulated Trial and Error**
Boshi Wang[#], Hao Fang, Jason Eisner, Benjamin Van Durme, Yu Su.
Annual Conference of the Association for Computational Linguistics (**ACL**), 2024

[51] **When is Tree Search Useful for LLM Planning? It Depends on the Discriminator**
Ziru Chen, Michael White, Raymond Mooney, Ali Payani, Yu Su, Huan Sun.
Annual Conference of the Association for Computational Linguistics (**ACL**), 2024

[50] **Dual-View Visual Contextualization for Web Navigation**
Jihyung Kil, Chan Hee Song[+], Boyuan Zheng[+], Xiang Deng, Yu Su, Wei-Lun Chao.
Conference on Computer Vision and Pattern Recognition (**CVPR**), 2024

[49] **AgentBench: Evaluating LLMs as Agents**
Xiao Liu, Hao Yu, Hanchen Zhang, Yifan Xu, Xuanyu Lei, Hanyu Lai, Yu Gu[+], Hangliang Ding, Kaiwen Men, Kejuan
Yang, Shudan Zhang, Xiang Deng, Aohan Zeng, Zhengxiao Du, Chenhui Zhang, Sheng Shen, Tianjun Zhang, Yu
Su, Huan Sun, Minlie Huang, Yuxiao Dong, Jie Tang.
International Conference on Learning Representations (**ICLR**), 2024

[48] **MUFFIN: Curating Multi-Faceted Instructions for Improving Instruction-Following**
Renze Lou, Kai Zhang[+], Jian Xie[+], Yuxuan Sun, Janice Ahn, Hanzi Xu, Yu Su, Wenpeng Yin.
International Conference on Learning Representations (**ICLR**), 2024

[47] **A Simple Interpretable Transformer for Fine-Grained Image Classification and Analysis**
Dipanjyoti Paul[+], Arpita Chowdhury, Xinqi Xiong, Feng-Ju Chang, David Carlyn, Samuel Stevens[+], Kaiya Provost,
Anuj Karpatne, Bryan Carstens, Daniel Rubenstein, Charles Stewart, Tanya Berger-Wolf, Yu Su, Wei-Lun Chao.
International Conference on Learning Representations (**ICLR**), 2024

[46] **Automatic Evaluation of Attribution by Large Language Models**
Xiang Yue, Boshi Wang, Kai Zhang[+], Ziru Chen, Yu Su, Huan Sun.
Conference on Empirical Methods in Natural Language Processing: Findings (**EMNLP: Findings**), 2023

[45] **Error Detection for Text-to-SQL Semantic Parsing**
Shijie Chen[+], Ziru Chen, Huan Sun, Yu Su.
Conference on Empirical Methods in Natural Language Processing: Findings (**EMNLP: Findings**), 2023

[44] **Solving the Right Problem is Key for Translational NLP: A Case Study in UMLS Vocabulary Insertion**
Bernal Jimenez Gutierrez[+], Yuqing Mao, Vinh Nguyen, Kin Wah Fung, Yu Su, Olivier Bodenreider.
Conference on Empirical Methods in Natural Language Processing: Findings (**EMNLP: Findings**), 2023

[43] **MagicBrush: A Manually Annotated Dataset for Instruction-Guided Image Editing**
Kai Zhang[+], Lingbo Mo, Wenhu Chen, Huan Sun, Yu Su.
In the Conference on Neural Information Processing Systems (**NeurIPS**), Datasets and Benchmarks Track, 2023

[42] **Holistic Transfer: Towards Non-Disruptive Fine-Tuning with Partial Target Data**
Cheng-Hao Tu, Hong-You Chen, Jike Zhong, Zheda Mai, Vardaan Pahuja[+], Tanya Berger-Wolf, Song Gao, Charles Stewart, Yu Su, Wei-Lun Chao.
In the Conference on Neural Information Processing Systems (**NeurIPS**), 2023

[41] **A Retrieve-and-Read Framework for Knowledge Graph Link Prediction**
Vardaan Pahuja[+], Boshi Wang, Hugo Latapie, Jayanth Srinivasa, Yu Su.
In the ACM International Conference on Information and Knowledge Management (**CIKM**), 2023

[40] **Few-shot In-context Learning on Knowledge Base Question Answering**
Tianle Li, Xueguang Ma, Alex Zhuang, Yu Gu[+], Yu Su, Wenhu Chen
Annual Conference of the Association for Computational Linguistics (**ACL**), 2023

[39] **Federated Learning for Semantic Parsing: Task Formulation, Evaluation Setup, New Algorithms**
Tianshu Zhang, Changchang Liu, Wei-Han Lee, Yu Su, Huan Sun
Annual Conference of the Association for Computational Linguistics (**ACL**), 2023

[38] **Privacy-Preserving Domain Adaptation of Semantic Parsers**
Fatemehsadat Mireshghallah[#], Yu Su, Tatsunori Hashimoto, Jason Eisner, Richard Shin
Annual Conference of the Association for Computational Linguistics (**ACL**), 2023

[37] **Text-to-SQL Error Correction with Language Models of Code**
Ziru Chen, Shijie Chen[+], Michael White, Raymond Mooney, Ali Payani, Jayanth Srinivasa, Yu Su, Huan Sun
Annual Conference of the Association for Computational Linguistics (**ACL**), short paper, 2023

[36] **Aligning Instruction Tasks Unlocks Large Language Models as Zero-Shot Relation Extractors**
Kai Zhang[+], Bernal Jimenez Gutierrez[+], Yu Su
Annual Conference of the Association for Computational Linguistics: Findings (**Findings of ACL**), 2023

[35] **When More Data Hurts: A Troubling Quirk in Developing Broad-Coverage Natural Language Understanding Systems**
Elias Stengel-Eskin[#], Emmanouil Antonios Platanios, Adam Pauls, Sam Thomson, Hao Fang, Benjamin Van Durme, Jason Eisner, and Yu Su
Conference on Empirical Methods in Natural Language Processing (**EMNLP**), 2022

[34] **Thinking about GPT-3 In-Context Learning for Biomedical IE? Think Again**
Bernal Jiménez Gutiérrez[+], Nikolas McNeal[+], Clay Washington[+], You Chen, Lang Li, Huan Sun, and Yu Su
Conference on Empirical Methods in Natural Language Processing: Findings (**Findings of EMNLP**), 2022

[33] **Knowledge Base Question Answering: A Semantic Parsing Perspective**
Yu Gu[+], Vardaan Pahuja[+], Gong Cheng, and Yu Su
Conference on Automated Knowledge Base Construction (**AKBC**), 2022

[32] **One Step at a Time: Long-Horizon Vision-and-Language Navigation with Milestones**
Chan Hee Song[+], Jihyung Kil, Tai-Yu Pan, Brian M. Sadler, Wei-Lun Chao, Yu Su
IEEE Conference on Computer Vision and Pattern Recognition (**CVPR**), 2022

[31] **Bridging the Generalization Gap in Text-to-SQL Parsing with Schema Expansion**
Chen Zhao[#], Yu Su, Adam Pauls, Emmanouil Antonios Platanios
Annual Conference of the Association for Computational Linguistics (**ACL**), 2022

[30] **ReasonBERT: Pre-trained to Reason with Distant Supervision**
Xiang Deng, Yu Su, Alyssa Lees, You Wu, Cong Yu, and Huan Sun
Conference on Empirical Methods in Natural Language Processing (**EMNLP**), 2021

[29] **A Systematic Investigation of KB-Text Embedding Alignment at Scale**
Vardaan Pahuja[+], Yu Gu[+], Wenhu Chen, Mehdi Bahrami, Lei Liu, Wei-Peng Chen, and Yu Su
*Annual Conference of the Association for Computational Linguistics* (**ACL**), 2021

[28] **Compositional Generalization for Neural Semantic Parsing via Span-level Supervised Attention**
Pengcheng Yin, Hao Fang, Graham Neubig, Adam Pauls, Emmanouil Antonios Platanios, Yu Su, Sam Thomson, and Jacob Andreas
*Annual Conference of the North American Chapter of the Association for Computational Linguistics - Human Language Technologies* (**NAACL-HLT**), short paper, 2021

[27] **Beyond I.I.D.: Three Levels of Generalization for Question Answering on Knowledge Bases**
Yu Gu[+], Sue Kase, Michelle Vanni, Brian Sadler, Percy Liang, Xifeng Yan, and Yu Su
*The Web Conference* (**TheWebConf, previously WWW**), 2021
**Top 15 Most Cited Papers at TheWebConf'21**

[26] **An Imitation Game for Learning Semantic Parsers from User Interaction**
Ziyu Yao, Yiqi Tang[+], Scott Wen-tau Yih, Huan Sun, and Yu Su
*Conference on Empirical Methods in Natural Language Processing* (**EMNLP**), 2020

[25] **KGPT: Knowledge-Grounded Pre-Training for Data-to-Text Generation**
Wenhu Chen, Yu Su, Xifeng Yan, and William Yang Wang
*Conference on Empirical Methods in Natural Language Processing* (**EMNLP**), 2020

[24] **Document Classification for COVID-19 Literature**
Bernal Jiménez Gutiérrez[+], Jucheng Zeng, Dongdong Zhang, Ping Zhang, and Yu Su
*Findings of EMNLP*, short paper, 2020

[23] **Logical Natural Language Generation from Open-Domain Tables**
Wenhu Chen, Jianshu Chen, Yu Su, Zhiyu Chen, and William Yang Wang
*Annual Conference of the Association for Computational Linguistics* (**ACL**), 2020

[22] **Model-based Interactive Semantic Parsing: A Unified Formulation and A Text-to-SQL Case Study**
Ziyu Yao, Yu Su, Huan Sun, and Scott Wen-tau Yih
*Conference on Empirical Methods in Natural Language Processing* (**EMNLP**), 2019

[21] **HierCon: Hierarchical Organization of Technical Documents based on Concepts**
Keqian Li, Shiyang Li, Semih Yavuz, Hanwen Zha, Yu Su, and Xifeng Yan
*IEEE International Conference on Data Mining* (**ICDM**), 2019
**Best of ICDM 2019 Selection**

[20] **Global Textual Relation Embedding for Relational Understanding**
Zhiyu Chen, Hanwen Zha, Honglei Liu, Wenhu Chen, Xifeng Yan, and Yu Su
*Annual Conference of the Association for Computational Linguistics* (**ACL**), short paper, 2019

[19] **How Large A Vocabulary Does Text Classification Need? A Variational Approach on Vocabulary Selection**
Wenhu Chen, Yu Su, Yilin Shen, Zhiyu Chen, Xifeng Yan and William Yang Wang
*Annual Conference of the North American Chapter of the Association for Computational Linguistics* (**NAACL**), 2019

[18] **Learning to Compose Topic-Aware Mixture of Experts for Zero-Shot Video Captioning**
Xin Wang, Jiawei Wu, Da Zhang, Yu Su, William Yang Wang
*AAAI Conference on Artificial Intelligence* (**AAAI**), 2019

[17] **Concept Mining via Embedding**
Keqian Li, Hanwen Zha, Yu Su, Xifeng Yan
*IEEE International Conference on Data Mining* (**ICDM**), 2018

[16] **XL-NBT: A Cross-lingual Neural Belief Tracking Framework**
Wenhu Chen, Jianshu Chen, Yu Su, Xin Wang, Dong Yu, Xifeng Yan and William Yang Wang
*23th Conference on Empirical Methods in Natural Language Processing* (**EMNLP**), 2018

[15] **What It Takes to Achieve 100% Condition Accuracy on WikiSQL**
Semih Yavuz, Izzeddin Gur, Yu Su, Xifeng Yan
*23th Conference on Empirical Methods in Natural Language Processing* (**EMNLP**), 2018

[14] **DialSQL: Dialogue Based Structured Query Generation**
Izzeddin Gur, Semih Yavuz, Yu Su, Xifeng Yan
*56th Annual Meeting of the Association for Computational Linguistics* (**ACL**), 2018
(Acceptance rate: 258/1018=25.3%)

[13] **Natural Language Interfaces with Fine-Grained User Interaction: A Case Study on Web APIs**
Yu Su, Ahmed H. Awadallah, Miaosen Wang, Ryen White
*41st International ACM SIGIR Conference on Research and Development in Information Retrieval* (**SIGIR**), 2018
(Acceptance rate: 86/409=21.0%)

[12] **Global Relation Embedding for Relation Extraction**
Yu Su*, Honglei Liu*, Semih Yavuz, Izzeddin Gur, Huan Sun, Xifeng Yan (*: equal contribution)
*16th Annual Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies* (**NAACL-HLT**), 2018
(Acceptance rate: 207/665=31.1%)

[11] **Unsupervised Neural Categorization for Scientific Publications**
Keqian Li, Hanwen Zha, Yu Su, Xifeng Yan
*18th SIAM International Conference on Data Mining* (**SDM**), 2018
(Acceptance rate: 87/375=23.2%)

[10] **Building Natural Language Interfaces to Web APIs**
Yu Su, Ahmed H. Awadallah, Patrick Pantel, Michael Gamon, Madian Khabsa, Mark Encarnacion
*26th ACM International Conference on Information and Knowledge Management* (**CIKM**), 2017
(Acceptance rate: 171/820=20.9%)

[9] **Cross-domain Semantic Parsing via Paraphrasing**
Yu Su, Xifeng Yan
*22th Conference on Empirical Methods in Natural Language Processing* (**EMNLP**), 2017
(Acceptance rate: 216/836=25.8%)

[8] **An End-to-End Deep Framework for Answer Triggering with a Novel Group-Level Objective**
Jie Zhao, Yu Su, Ziyu Guan, Huan Sun
*22th Conference on Empirical Methods in Natural Language Processing* (**EMNLP**), short paper, 2017
(Acceptance rate: 107/582=18.4%)

[7] **Recovering Question Answering Errors via Query Revision**
Semih Yavuz, Izzeddin Gur, Yu Su, Xifeng Yan
*22th Conference on Empirical Methods in Natural Language Processing* (**EMNLP**), short paper, 2017
(Acceptance rate: 107/582=18.4%)

[6] **On Generating Characteristic-rich Question Sets for QA Evaluation**
Yu Su, Huan Sun, Brian Sadler, Mudhakar Srivatsa, Izzeddin Gur, Zenghui Yan, Xifeng Yan
*21th Conference on Empirical Methods in Natural Language Processing* (**EMNLP**), 2016
(Acceptance rate: 177/687=25.8%)

[5] **Improving Semantic Parsing via Answer Type Inference**
Semih Yavuz, Izzeddin Gur, Yu Su, Mudhakar Srivatsa, Xifeng Yan
*21th Conference on Empirical Methods in Natural Language Processing* (**EMNLP**), 2016
(Acceptance rate: 177/687=25.8%)

[4] **A Fast Kernel for Attributed Graphs**
Yu Su, Fangqiu Han, Richard E. Harang, Xifeng Yan
*16th SIAM International Conference on Data Mining* (**SDM**), 2016
(Acceptance rate: 96/371=25.9%)

[3] **Table Cell Search for Question Answering**
Huan Sun, Hao Ma, Xiaodong He, Wen-Tau Yih, Yu Su, Xifeng Yan
*25th International Conference on World Wide Web* (**WWW**), 2016
(Acceptance rate: 115/727=15.8%)

[2] **Visual Graph Query Formulation and Exploration: A New Perspective on Information Retrieval at the Edge**
Sue Kase, Michelle Vanni, Joanne Knight, Yu Su, Xifeng Yan
*SPIE 9851, Next-Generation Analyst IV* (**SPIE Defense+Security**), 2016

[1] **Exploiting Relevance Feedback in Knowledge Graph Search**
Yu Su, Shengqi Yang, Huan Sun, Mudhakar Srivatsa, Sue Kase, Michelle Vanni, Xifeng Yan
*21th ACM SIGKDD International Conference on Knowledge Discovery and Data Mining* (**KDD**), 2015
(Acceptance rate: 160/819=19.5%)

## JOURNAL PAPERS

[6] **Discovering Severe Adverse Reactions from Pharmacokinetic Drug-Drug Interactions through Literature Analysis and Electronic Health Record Verification**
Eugene Jeong, Yu Su, Lang Li, You Chen
Clinical Pharmacology & Therapeutics, 2024

[5] **Discovering Clinical Drug-Drug Interactions with Known Pharmacokinetics Mechanisms using Spontaneous Reporting Systems and Electronic Health Records**
Eugene Jeong, Yu Su, Lang Li, You Chen
Journal of Biomedical Informatics, 2024

[4] **Revealing the Dynamic Landscape of Drug-Drug Interactions through Network Analysis**
Eugene Jeong, Bradley Malin, Scott D Nelson, Yu Su, Lang Li, You Chen
Frontiers in Pharmacology, 2023

[3] **Detecting Drug-Drug Interactions Between COVID-19 Therapies and Concomitant Medications Using the FDA Adverse Event Reporting System**
Eugene Jeong, Scott D Nelson, Yu Su, Bradley Malin, Lang Li, You Chen
Frontiers in Pharmacology, 2022

[2] **Random Control Selection for Conducting High-throughput Adverse Drug Events Screening Using Large-scale Longitudinal Health Data**
Chien-Wei Chiang, Pengyue Zhang, Macarius Donneyong, You Chen, Yu Su, Lang Li
CPT: Pharmacometrics & Systems Pharmacology (**PSP**), 2021

[1] **Task-Oriented Dialogue as Dataflow Synthesis**
Semantic Machines, Jacob Andreas, John Bufe, David Burkett, Charles Chen, Josh Clausman, Jean Crawford, Kate Crim, Jordan DeLoach, Leah Dorner, Jason Eisner, Hao Fang, Alan Guo, David Hall, Kristin Hayes, Kellie Hill, Diana Ho, Wendy Iwaszuk, Smriti Jha, Dan Klein, Jayant Krishnamurthy, Theo Lanman, Percy Liang, Christopher H. Lin, Ilya Lintsbakh, Andy McGovern, Aleksandr Nisnevich, Adam Pauls, Dmitrij Petters, Brent Read, Dan Roth, Subhro Roy, Jesse Rusak, Beth Short, Div Slomin, Ben Snyder, Stephon Striplin, Yu Su, Zachary Tellman, Sam Thomson, Andrei Vorobev, Izabela Witoszko, Jason Wolfe, Abby Wray, Yuchen Zhang, and Alexander Zotov
*Transactions of the Association for Computational Linguistics* (**TACL**), 2020
**Deployed as the official conversational interface for Microsoft Outlook**

## REFEREED WORKSHOP PAPERS

[6] **SalsaBot: Towards a Robust and Generalizable Embodied Agent**
Chan Hee Song[+], Jiaman Wu[+], Ju-Seung Byun, Zexin Xu[+], Vardaan Pahuja[+], Goonmeet Bajaj, Samuel Stevens[+], Ziru Chen, Yu Su
Embodied AI Workshop at CVPR, 2023

[5] **Biomedical Language Models are Robust to Sub-optimal Tokenization**
Bernal Jimenez Gutierrez[+], Huan Sun, Yu Su
BioNLP Workshop at ACL, 2023

[4] **Error Detection for Interactive Text-to-SQL Semantic Parsing**
Shijie Chen[+], Ziru Chen, Huan Sun, Yu Su
InterNLP Workshop at NeurIPS, 2022

[3] **Understanding Mimicry in Butterflies from Images using Machine Learning**
Reshma R Babu, Yael Stochel, Christopher Lawrence, Daniel Rubenstein, Chuck Stewart, Wei-Lun Chao, David Carlyn, Jihyung Kil, Yu Su, Luke Song[+], Anuj Karpatne, Mohannad Elhamod, Krzysztof Kozak, Owen McMillan, Tanya Berger-Wolf
CV4Animals Workshop at CVPR, 2022

[2] **An Investigation of Language Model Interpretability via Sentence Editing**
Samuel Stevens[+] and Yu Su
BlackboxNLP Workshop at EMNLP, 2021

[1] **On the Validity of Geosocial Mobility Traces**
Zengbin Zhang, Lin Zhou, Xiaohan Zhao, Gang Wang, Yu Su, Miriam Metzger, Haitao Zheng, and Ben Y. Zhao
*12th ACM Workshop on Hot Topics in Networks* (**HotNets**), 2013
(Acceptance rate: 26/110=23.6%)

## Conference Tutorials

[3] **Language Agents: Foundations, Prospects, and Risks**
Yu Su, Diyi Yang, Shunyu Yao and Tao Yu
*Conference on Empirical Methods in Natural Language Processing* (**EMNLP**), 2024

[2] **Scalable Construction and Querying of Massive Knowledge Bases**
Xiang Ren, Yu Su, Pedro Szekely, Xifeng Yan
*The Web Conference* (**TheWebConf**), 2018

[1] **Construction and Querying of Large-Scale Knowledge Bases**
Xiang Ren, Yu Su, Xifeng Yan
*ACM International Conference on Information and Knowledge Management* (**CIKM**), 2017

# Students

## PhD Students
- Yu Gu (SP20 - ): language agents
- Vardaan Pahuja (SP20 - ): knowledge-based reasoning
- Bernal Jiménez Gutiérrez (SP20 - ): biologically-inspired AI and NLP for biomedicine
- Chan Hee (Luke) Song (AU20 - ): embodied agents
- Samuel Stevens (AU21 - ): (multimodal) foundation models
- Shijie Chen (AU21 - , co-advised with Huan Sun): semantic parsing
- Kai Zhang (AU22 - ): multimodal foundation models
- Jiaman (Lisa) Wu (AU22 - , co-advised with Wei-Lun Chao): AI for biology
- Boyuan Zheng (AU23 - ): language agents
- Yiheng Shu (AU23 - ): memory & retrieval
- Boyu Gou (AU23 - ): language agents
- Yuting Ning (AU24 - , co-advised with Huan Sun): language agents

### Master Students
- Jason Xu (AU22 - SP23): PhD at UT Dallas
- Scott Salisbury (SP24 - SP25)
- Weijian Qi (AU24 - )

### Undergraduate Students
- Eddy Luo (OSU CSE; 2022 - 2023): Publication at CIKM'24.
- Alison Zhong (OSU CSE; 2022 - 2024)
- Sparsh Kustagishettar (OSU CSE; 2022 - 2023)
- Clay Washington (OSU CIS; 2021 - 2023): Publication at Findings of EMNLP'22 and ICCV'23.
- Nikolas McNeal (OSU CIS; 2021 - 2023): Publication at Findings of EMNLP'22. Placement: PhD at Georgia Tech.
- Samuel Stevens (OSU CSE; 2020 - 2021): Publication at BlackboxNLP'22. Placement: PhD at OSU.

### High School Students
- Evan Huang (2021 summer): Submission to AMIA 2022 Annual Symposium High School Scholars program

### Graduate Dissertation/Thesis Committee Member
- Hong You Chen (CSE PhD): "New Aspects in Deep Federated Learning Towards Matching the Centralized Performance"
- Xiang Deng (CSE PhD): "AI-powered Data System: Unified Semantic Layer and Natural Language Interface"
- Arpan Jain (CSE PhD): "Novel Parallelization Strategies for High-Performance DNN Training on HPC Systems"
- Zichen Zhang (CSE PhD): "Design of Unmanned Aerial Systems for Precision Agriculture using Machine Learning Techniques"
- Zhen Wang (CSE PhD): "Knowledge-Centric Natural Language Processing: Acquisition, Representation and Reasoning"
- Saumya Sahai (CSE MS): "A Study on Informal Fallacies in Online Discussions"
- Ziyu Yao (CSE PhD): "On Advancing Natural Language Interfaces: Data Collection, Model Development, and User Interaction"
- Md Muntasir Zitu (BMI PhD): "Identification of Adverse Drug Events from clinical free texts of Electronic Health Records (EHR) data using Natural Language Processing"
- Jie Zhao (CSE PhD): "Towards Building Trustworthy Automatic Question Answering Systems"
- Semih Cayci (ECE PhD): "Online Learning for Optimal Control of Communication and Computing Systems"
- Adam Stiff (CSE PhD): "Mitigation of Data Scarcity Issues for Semantic Classification in a Virtual Patient Dialogue Agent"

# Professional Service

### Organizing Committee
- Bridging Planning and Reasoning in Natural Languages with Foundational Models, Philadelphia, United States, 2025 (co-located with AAAI)
- Second Workshop on Imageomics, Philadelphia, United States, 2025 (co-located with AAAI)
- First Workshop on Imageomics, Vancouver, Canada, 2024 (co-located with AAAI)
- Workflow Co-Chair, SIGKDD 2023
- Faculty Advisor to Student Research Workshop, NAACL 2021
- First Workshop on Natural Language Processing for Programming, Bangkok, Thailand, 2021 (co-located with ACL)
- First Workshop on Natural Language Interfaces (NLI), Seattle, United States, 2020 (co-located with ACL)
- First Workshop on Knowledge Base Construction, Reasoning and Mining (KBCOM), Los Angeles, United States, 2018 (co-located with WSDM).

### Editorial Board
- Action Editor, Transactions of the Association for Computational Linguistics (**TACL**): 2025 - present
- Associate Editor, IEEE Transaction on Big Data (**IEEE TBD**): 2023 - present

## Panel

- Databricks Data+AI Summit, Compound AI Systems Workshop, June 13, 2024
- Workshop of Deep Learning on Graphs for Natural Language Processing@NAACL'22, July 15, 2022

## Program Committee Member/Reviewer

- Annual Meeting of the Association for Computational Linguistics (**ACL**): 2017-2025 (**Area Chair** in 2022-2025)
- Conference on Empirical Methods in Natural Language Processing (**EMNLP**): 2017-2024 (**Area Chair** in 2023-2024)
- Annual Conference of the North American Chapter of the Association for Computational Linguistics (**NAACL**): 2019, 2021, 2022
- ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (**KDD**): 2018-2023 (**session chair** in 2019/2020)
- The IEEE / CVF Computer Vision and Pattern Recognition Conference (**CVPR**): 2023-2025
- Conference on Neural Information Processing Systems (**NeurIPS**): 2023, 2024
- International Conference on Learning Representations (**ICLR**): 2024 (**Senior Area Chair**)
- Conference on Language Models (**CoLM**): 2024 (**Area Chair**)
- AAAI Conference on Artificial Intelligence (**AAAI**): 2019, 2021-24 (**Senior PC** in 2023/2024)
- The International World Wide Web Conference (**WWW**): 2018
- SIAM International Conference on Data Mining (**SDM**): 2019
- ACM International Conference on Information and Knowledge Management (**CIKM**): 2017
- Conference on Automated Knowledge Base Construction (**AKBC**): 2019-2022
- Conference on Computational Natural Language Learning (**CoNLL**): 2018
- CCF Conference on Natural Language Processing and Chinese Computing (**NLPCC**): 2017, 2018, 2020 (**Area Chair**)
- ACL Rolling Review (**ARR**): Reviewer: 2021 - 2023. Action Editor: 2024 - present
- Transactions of the Association for Computational Linguistics (**TACL**): 2021 - 2024
- Harvard Data Science Review (**HDSR**): 2025 - present
- IEEE Transactions on Neural Networks and Learning Systems (**TNNLS**): 2020 - 2023
- IEEE Transactions on Knowledge and Data Engineering (**TKDE**): 2017 - 2023

## Outreach Activities

- 2020-present. Faculty mentor in the Ohio State LSAMP (Louis Stokes Alliances for Minority Participation) Program.
  - Mentor female African-American undergraduate students in CSE.
- March 2018. Introduce data science and AI to high school students from Laguna Blanca School, Santa Barbara, CA.
- March 2018. "Afternoon with Academia," UCSB chapter of Society of Asian Scientists and Engineers.

## University Service

- Faculty advisor to OSU Competitive Programming Club: 2020-present
- TDAI Fall Forum Organizing Committee: 2021
- Diversity and Inclusion Committee: 2022-present
- Graduate Admission Committee: 2019-2022 (campus visit co-organizer in 2022)
- Space Committee: 2020-2021
- Faculty Search Committee: AI (2021-2022), Human-Centric Computing (2021-2022), 2023-2024

# Invited Talks

[49] On Memory, Reasoning, and Planning of Language Agents
**Berkeley Advanced LLM Agents MOOC**. February 10, 2025.

[48] A Holistic and Critical Look at Language Agents
**Nvidia**. February 7, 2025.

[47] A Holistic and Critical Look at Language Agents
**Nvidia**. February 7, 2025.

[46] Pressing Safety Issues with Language Agents
**Workshop on Towards Safe & Trustworthy Agents@NeurIPS'24**. December 15, 2024.

[45]  Web Agents: A New Frontier for Embodied Agents
      **ServiceNow**. November 25, 2024.

[44]  A Holistic and Critical Look at Language Agents
      **Princeton University**. November 11, 2024. Princeton, United States.

[43]  Web Agents: A New Frontier for Embodied Agents
      **University of Michigan**. October 30, 2024. Ann Arbor, United States.

[42]  A Holistic and Critical Look at Language Agents
      **LMU Munich/TU Darmstadt**. Sept 16, 2024.

[41]  Web Agents: A New Frontier for Embodied Agents
      **Fourth International Combined Workshop on Spatial Language Understanding and Grounded Communication for Robotics@ACL'24**. August 16, 2024. Bangkok, Thailand.

[40]  A Holistic and Critical Look at Language Agents
      **Apple**. June 28, 2024. Cupertino, United States.

[39]  A Holistic and Critical Look at Language Agents
      **Amazon**. June 18, 2024. Seattle, United States.

[38]  A Holistic and Critical Look at Language Agents
      **JP Morgan Chase ML Center**. May 16, 2024.

[37]  A Holistic and Critical Look at Language Agents
      **The Agent Workshop at Carnegie Mellon University**. May 2, 2024.

[36]  Language Agents: A Critical Evolutionary Step of Artificial Intelligence
      **Workshop on Metacognitive Prediction of AI Behavior at Arizona State University**. Nov 14, 2023.

[35]  Language Agents: A Critical Evolutionary Step of Artificial Intelligence
      **Salesforce**. Nov 7, 2023.

[34]  Language Agents: A Critical Evolutionary Step of Artificial Intelligence
      **University of California, San Diego**. Oct 9, 2023.

[33]  Language Agents: A Critical Evolutionary Step of Artificial Intelligence
      **Pinterest Labs**. Aug 29, 2023.

[32]  Language Agents: A Critical Evolutionary Step of Artificial Intelligence
      **The University of Hong Kong**. Aug 24, 2023.

[31]  Language Agents: A Critical Evolutionary Step of Artificial Intelligence
      **IJCAI LLM Symposium**. Aug 21, 2023.

[30]  Mind2Web: Towards a Generalist Agent for the Web
      **IJCAI Automates Workshop**. Aug 21, 2023.

[29]  Language Agents: A Critical Evolutionary Step of Artificial Intelligence
      **Tsinghua University**. Aug 18, 2023.

[28]  Language Agents: A Critical Evolutionary Step of Artificial Intelligence
      **Fudan University**. Aug 11, 2023.

[27]  AI: The Status Quo
      **OSU RISK Institute**. June 6, 2023.

[26]  Grounding Language Models to Real-World Environments
      **Army Research Lab**. June 2, 2023.

[25]  Grounding Language Models to Real-World Environments
      **Amazon**. March 30, 2023.

[24]  Grounding Language Models to Real-World Environments
      **University of Tokyo**. March 7, 2023.

[23]  Will Graphs Lead to the Next Breakthrough of Conversational AI?
      **University of Delaware**. November 16, 2022.

[22]  Will Graphs Lead to the Next Breakthrough of Conversational AI?
      **Workshop of Deep Learning on Graphs for Natural Language Processing@NAACL'22**. July 15, 2022. Seattle, United States.

[21] A New Paradigm of Conversational AI
**OSU TDAI Deep Learning Summer School**. June 2, 2022. Columbus, Ohio, United States.

[20] Emerging Frontiers of Conversational AI
**JD.com, Inc**. April 28, 2022.

[19] Emerging Frontiers of Conversational AI
**Nanjing University**. April 20, 2022.

[18] Emerging Frontiers of Conversational AI
**Institute for Interdisciplinary Information Sciences, Tsinghua University**. November 2, 2021.

[17] Emerging Frontiers of Conversational AI
**USC**. November 2, 2021.

[16] Task-Oriented Dialogue as Dataflow Synthesis
**Faculty-in-Focus Seminar, CSE@OSU**. November 09, 2020. Columbus, OH, United States.

[15] Towards Democratizing Data Science with AI-powered Knowledge Engines
**Stanfard NLP Seminar**. February 07, 2019. Stanford, CA, United States.

[14] Bridging the Gap between Human and Data with AI
**Microsoft Semantic Machines**. August 13, 2018. Berkeley, CA, United States.

[13] Bridging the Gap between Human and Data with AI
**Fudan University**. July 24, 2018. Shanghai, China.

[12] Bridging the Gap between Human and Data with AI
**Tsinghua University**. June 21, 2018. Beijing, China.

[11] Bridging the Gap between Human and Data with AI
**Fujitsu Laboratories of America**. March 9, 2018. Sunnyvale, California, United States.

[10] Bridging the Gap between Human and Data with AI
**University of Massachusetts**. February 15, 2018. Amherst, Massachusetts, United States.

[9] Bridging the Gap between Human and Data with AI
**BMI@OSU**. January 26, 2018. Columbus, Ohio, United States.

[8] Bridging the Gap between Human and Data with AI
**CSE@OSU**. January 25, 2018. Columbus, Ohio, United States.

[7] On Building Natural Language Interface to Data and Services
**Toutiao AI Lab**. October 17, 2017. Beijing, China.

[6] On Building Natural Language Interface to Data and Services
**Tsinghua University**. October 16, 2017. Beijing, China.

[5] On Building Natural Language Interface to Data and Services
**Fudan University**. October 10, 2017. Shanghai, China.

[4] Building Natural Language Interfaces to Web APIs
**Microsoft Research**, MSR AI Seminar. July 25, 2017. Redmond, Washington, United States.

[3] Learning from Zero: Recent Advances in Bootstrapping Semantic Parsers using Crowdsourcing
**USC/ISI**. October 28, 2016. Los Angeles, California, United States.

[2] Exploiting Relevance Feedback in Knowledge Graph Search
**IBM Research**. August 15, 2015. Yorktown Heights, New York, United States.

[1] Search over Large-scale Knowledge Graphs
**UCSB**, IGERT Network Science Seminar. August 14, 2014. Santa Barbara, California, United States.