# Yonatan Bisk

*Assistant Professor of Computer Science*

*GHC 6703*
✉ *ybisk@cs.cmu.edu*
*he/him*

## Positions

2020 – **Assistant Professor** *Carnegie Mellon University*
Language Technologies Institute
Robotics Institute (courtesy)

Previous

2022 – **Visiting Professor** *Meta Fundamental AI Research (FAIR)* *w/ Dhruv Batra & Roozbeh Mottaghi*

2021 – **Consulting Professor** *Microsoft Research*

2019 – **Visiting Researcher** *Microsoft Research* *w/ Jianfeng Gao*

2017 – **Postdoctoral Scholar**
University of Washington & Allen Institute for Artificial Intelligence w/ Yejin Choi

2015 – **Postdoctoral Scholar**
Information Sciences Institute, University of Southern California w/ Daniel Marcu

## Education

2015 **PhD in Computer Science** *The University of Illinois at Urbana-Champaign*,
Thesis: **Unsupervised Grammar Induction with Combinatory Categorial Grammars**
Advisor: Julia Hockenmaier
Committee: Jason Eisner, Dan Roth, ChengXiang Zhai

2009 **BS in Computer Science** *The University of Texas at Austin* Turing Scholar,
Thesis: The Necessity of Separating Control and Logic When Grounding Language using Neuroevolution
Advisor: Risto Miikkulainen Second Reader: Raymond Mooney

## PhD Students

TalkingToRobots.com

| | | | | | | |
|---|---|---|---|---|---|---|
| PhD | **Jared Fernandez** | he/him | *Efficiency* | *(co-Emma Strubell)* | LTI | 2020 – |
| PhD | **Yingshan Chang** | she/her | *Generalization* | | LTI | 2022 – |
| PhD | **Abitha Thankaraj** | she/her | *Planning* | | CSD | 2024 – |
| PhD | **Rosa Vitiello** | she/her | *Collaboration* | *(co-Carolyn Rose)* | LTI | 2024 – |
| PhD | **Quanting Xie** | he/him | *Manipulation* | | RI | 2024 – |
| PhD | **Leena Mathur** | she/her | *Social Intelligence* | *(co-LP Morency)* | LTI | 2024 – |
| PhD | **Haochen Zhang** | she/her | *Incoming* | | RI | 2025 – |
| PhD | **Annabella Macaluso** | she/her | *Incoming* | | RI | 2025 – |
| PhD | **Wenjie Li** | she/her | *Incoming* | | NI | 2024 – |

## Masters

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|---|---|---|---|---|---|
| MSR | **Jacob Thompson** | he/him | *Generalist Agents* | RI | 2024 |
| MSR | **Yash Jangir** | he/him | *Robust Policies* | RI | 2024 |
| 5th | **Claire Jin** | she/her | *Embodied Dialogue* | | 2024 |

## Alumni

### PhD

| | | |
|---|---|---|
| RI | **Vidhi Jain**<br>Lowering Barriers in Human-Robot Communication | 2021-2025, |
| MLD | **So Yeon Min** *(co-R Salakhutdinov)*<br>Situated Instruction Following | 2021-2025, |
| LTI | **Hao Zhu** *(co-G Neubig)*<br>Artificial Social Intelligence: Challenges, Environments, and Mechanisms | 2019-2024, |

### MS

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|---|---|---|---|---|---|---|
| 5th | **Sheryl Mathew** | she/her | *Collaboration* | | SCS | 2024 |
| MS | **Quanting Xie** | he/him | *LLMs for Robotics* | MechE | | 2023 |
| MLT | **Jimin Sun** | she/her | *Embodied Dialogue* | LTI | | 2022 – 2023 |
| MLT | **Yingshan Chang** | she/her | *Multimodal Reasoning* | LTI | | 2020 – 2022 |
| MLT | **Josh Zhanson** | he/him | *Embodied Visual Reps* | LTI | | 2020 – 2022 |
| MS | **Xiaoyu (Erin) Zhang** | she/her | *Collaborative Robots* *(co-O Kroemer)* | 5th | | 2021 – 2022 |

### Interns and Undergraduates

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|---|---|---|---|---|
| Ugrad | **Su Li** | she/her | *Robot Learning* | 2024 |
| Ugrad | **Maria Yampolsky** | she/her | *Audio* | 2024 |
| Intern | **Minyoung Hwang** | she/her | *Preference Learning* | 2024 |
| Ugrad | **Xiang Fan** | he/him | *Transformer Efficiency* *(co-E Strubell)* | 2022 |
| Intern | **Andy Liu** | he/him | *Theory-of-Mind* *(co-G Neubig)* | 2022 |
| Intern | **Deogratias Amani** | he/him | *Grounding* | 2022 |
| Ugrad | **Feiyu (Gavin) Zhu** | he/him | *Video Summarization* *(co-C Paxton)* | 2021 |
| Intern | **Melanie Sclar** | she/her | *Symmetric Theory-of-Mind* *(co-G Neubig)* | 2021 |
| Intern | **Blessing Bassey** | she/her | *TextVQA* | 2021 |

### Capstones

| | | | | | |
|---|---|---|---|---|---|
| MCDS | **VR Robot Teleop** | | | | 2024 |
| | Sophia Huang | | Jensen (Yi-Che) Huang | | Tianyi Cheng |
| MSAII | **Seed emergence** | | | | 2024 |
| | Harini Subramanyan | | Juanyun Mai | | Ameya Morbale |
| | Karthik Natarajan | | Noel D Souza | | Bohao Zhang |
| MRSD | **Assistive Robotics for Eldercare (*co-Z Erickson)** | | | | 2023 |
| | Abhinav Gupta | he/him | Atharva Pusalkar | he/him | |
| | Praveen Venkatesh | he/him | Shaolin Kataria | he/him | |
| | Shivam Tripathy | he/him | | | |
| MRSD | **Modular Teleop with Autonomy (*co-Z Erickson)** | | | | 2022 |
| | Jashkumar Diyora | he/him | Shruti Gangopadhyay | she/her | |
| | Jigar Patel | he/him | Prakhar Pradeep | he/him | |
| | Shivani Sivakumar | she/her | | | |
| MCDS | **Embodied Navigation and Interaction** | | | | 2022 |
| | Adhokshaja Madhwaraj | he/him | Kushagra Mahajan | he/him | |
| | Sai Vishwas Padigi | he/him | Vineeth Reddy | he/him | |
| | Malaika Vijay | she/her | Zheng (Jessica) Zhong | she/her | |

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|---|---|---|---|---|---|
| MCDS | **Embodied Dialogue and ToM** | | | | 2022 |
| | Xinyue Chen | she/her | Nikhil Gupta | he/him | |
| | Benny Jiang | he/him | Shubham Phal | he/him | |
| | Prasoon Varshney | he/him | | | |
| MCDS | **Novel Concept Learning** | | | | 2022 |
| | Bharani Ujjaini Kempaiah | she/her | Linyi Li | she/her | |
| MSAII | **Visual Patent Search** | | | | 2022 |
| | Suchong Dong | she/her | Zhiyuan Guo | he/him | |
| | Mansi Goyal | she/her | Marta Mendez Simon | she/her | |
| | Sreenidhi Sundaram | she/her | Leon Van Den Berghe | he/him | |

## Journal Publications

1 **Affordance RAG: Hierarchical Multimodal Retrieval with Affordance-Aware Embodied Memory for Mobile Manipulation** 2025
Ryosuke Korekata, Quanting Xie, Yonatan Bisk, Komei Sugiura
*IEEE Robotics and Automation Letters*

2 **Efficient Hardware Scaling and Diminishing Returns in Large-Scale Training of Language Models** 2025
Jared Fernandez, Luca Wehrstedt, Leonid Shamis, Mostafa Elhoushi, Kalyan Saladi, Yonatan Bisk, Emma Strubell, Jacob Kahn
*Transactions on Machine Learning Research*

3 **MotIF: Motion Instruction Fine-tuning** 2025
Minyoung Hwang, Joey Hejna, Dorsa Sadigh, Yonatan Bisk
*IEEE Robotics and Automation Letters*

4 **Training Vision-Language Transformers from Captions** 2023
Liangke Gui, Yingshan Chang, Qiuyuan Huang, Subhojit Som, Alexander Hauptmann, Jianfeng Gao, Yonatan Bisk
*Transactions on Machine Learning Research*

5 **The Return of Lexical Dependencies: Neural Lexicalized PCFGs** 2020
Hao Zhu, Yonatan Bisk, Graham Neubig
*Transactions of the Association for Computational Linguistics*

6 **An HDP Model for Inducing Combinatory Categorial Grammars** 2013
Yonatan Bisk, Julia Hockenmaier
*Transactions of the Association for Computational Linguistics*

## Conference Publications

7 **RobotArena ∞: Scalable Robot Benchmarking via Real-to-Sim Translation** 2026
Yash Jangir, Yidi Zhang, Kashu Yamazaki, Chenyu Zhang, Kuan-Hsun Tu, Tsung-Wei Ke, Lei Ke, Yonatan Bisk, Katerina Fragkiadaki
*The Fourteenth International Conference on Learning Representations*

8 **Unsupervised Discovery of Long-Term Spatiotemporal Periodic Workflows in Human Activities** 2026
Fan Yang, Quanting Xie, Atsunori Moteki, Shoichi Masui, Shan Jiang, Kanji Uchino, Yonatan Bisk, Graham Neubig
*The Winter Conference on Applications of Computer Vision*

9 **REM: Evaluating LLM Embodied Spatial Reasoning through Multi-Frame Trajectories** 2025
Jacob Thompson, Emiliano Garcia-Lopez, Yonatan Bisk
*Second Conference on Language Modeling*

10 **RAVEN: Resilient Aerial Navigation via Open-Set Semantic Memory and Behavior Adaptation** 2026
Seungchan Kim, Omar Alama, Dmytro Kurdydyk, John Keller, Nikhil Keetha, Wenshan Wang, Yonatan Bisk, Sebastian Scherer
*2026 IEEE International Conference on Robotics and Automation (ICRA)*

11 **MolErr2Fix: Benchmarking LLM Trustworthiness in Chemistry via Modular Error Detection, Localization, Explanation, and Correction** 2025
Yuyang Wu, Jinhui Ye, Shuhao Zhang, Lu Dai, Yonatan Bisk, Olexandr Isayev
*Conference on Empirical Methods in Natural Language Processing*

12 **Position: You Can't Manufacture a NeRF** 2025
Ani Kimmel, Mueed Ur Rehman, Yonatan Bisk, Gary K. Fedder
*Forty-second International Conference on Machine Learning Position Paper Track*

13 **Casper: Inferring Diverse Intents for Assistive Teleoperation with Vision Language Models** 2025
Huihan Liu, Rutav Shah, Shuijing Liu, Jack Pittenger, Mingyo Seo, Yuchen Cui, Yonatan Bisk, Roberto Martín-Martín, Yuke Zhu
*Conference on Robot Learning*

14 **Energy Considerations of Large Language Model Inference and Efficiency Optimizations** 2025
Jared Fernandez, Clara Na, Vashisth Tiwari, Yonatan Bisk, Sasha Luccioni, Emma Strubell
*The 63rd Annual Meeting of the Association for Computational Linguistics*

15 **Re-thinking Temporal Search for Long-Form Video Understanding** 2025
Jinhui Ye, Zihan Wang, Haosen Sun, Keshigeyan Chandrasegaran, Zane Durante, Cristobal Eyzaguirre, Yonatan Bisk, Juan Carlos Niebles, Ehsan Adeli, Li Fei-Fei, Jiajun Wu, Manling Li
*The IEEE/CVF Conference on Computer Vision and Pattern Recognition*

16 **Explore Theory-of-Mind: Program-Guided Adversarial Data Generation for Theory of Mind Reasoning** 2025
Melanie Sclar, Jane Yu, Maryam Fazel-Zarandi, Yulia Tsvetkov, Yonatan Bisk, Yejin Choi, Asli Celikyilmaz
*The Thirteenth International Conference on Learning Representations*

17 **ANAVI: Audio Noise Awareness using Visuals of Indoor environments for NAVIgation** 2024
Vidhi Jain, Rishi Veerapaneni, Yonatan Bisk
*Conference on Robot Learning*

18 **Situated Instruction Following** 2024
So Yeon Min, Xavi Puig, Devendra Singh Chaplot, Tsung-Yen Yang, Akshara Rai, Priyam Parashar, Ruslan Salakhutdinov, Yonatan Bisk, Roozbeh Mottaghi
*European Conference on Computer Vision*

19 **Gradient Localization Improves Lifelong Pretraining of Language Models** 2024
Jared Fernandez, Yonatan Bisk, Emma Strubell
*Findings of the Conference on Empirical Methods in Natural Language Processing*

20 **How to Train Your Fact Verifier: Knowledge Transfer with Multimodal Open Models** 2024
Jaeyoung Lee, Ximing Lu, Jack Hessel, Faeze Brahman, Youngjae Yu, Yonatan Bisk, Yejin Choi, Saadia Gabriel
*Findings of the Conference on Empirical Methods in Natural Language Processing*

21 **Tools Fail: Detecting Silent Errors in Faulty Tools** 2024
Jimin Sun, So Yeon Min, Yingshan Chang, Yonatan Bisk
*Conference on Empirical Methods in Natural Language Processing*

22 **Language Models Need Inductive Biases to Count Inductively** 2025
Yingshan Chang, Yonatan Bisk
*The Thirteenth International Conference on Learning Representations*

23 **DiffusionPID: Interpreting Diffusion via Partial Information Decomposition** 2024
Shaurya Dewan, Rushikesh Zawar, Prakanshul Saxena, Yingshan Chang, Andrew Luo, Yonatan Bisk
*Thirty-Eighth Annual Conference on Neural Information Processing Systems*

24 **VISREAS: Complex Visual Reasoning with Unanswerable Questions** 2024
Syeda Nahida Akter, Sangwu Lee, Yingshan Chang, Yonatan Bisk, Eric Nyberg
*Findings of the 62nd Annual Meeting of the Association for Computational Linguistics*

25 **AgentKit: Flow Engineering with Graphs, not Coding** 2024
Yue Wu, Yewen Fan, So Yeon Min, Shrimai Prabhumoye, Stephen McAleer, Yonatan Bisk, Ruslan Salakhutdinov, Yuanzhi Li, Tom Mitchell
*Conference on Language Modeling*

26 **Skews in the Phenomenon Space Hinder Generalization in Text-to-Image Generation** 2024
Yingshan Chang, Yasi Zhang, Zhiyuan Fang, Yingnian Wu, Yonatan Bisk, Feng Gao
*European Conference on Computer Vision*

27 **Direct Preference Optimization of Video Large Multimodal Models from Language Model Reward** 2025
Ruohong Zhang, Liangke Gui, Zhiqing Sun, Yihao Feng, Keyang Xu, Yuanhan Zhang, Di Fu, Chunyuan Li, Alexander Hauptmann, Yonatan Bisk, Yiming Yang
*Annual Conference of the Nations of the Americas Chapter of the ACL*

28 **Vid2Robot: End-to-end Video-conditioned Policy Learning with Cross-Attention Transformers** 2024
Vidhi Jain, Maria Attarian, Nikhil J Joshi, Ayzaan Wahid, Danny Driess, Quan Vuong, Pannag R Sanketi, Pierre Sermanet, Stefan Welker, Christine Chan, Igor Gilitschenski, Yonatan Bisk, Debidatta Dwibedi
*Robotics: Science and Systems*

29 **SOTOPIA-$\pi$: Interactive Learning of Socially Intelligent Language Agents** 2024
Ruiyi Wang, Haofei Yu, Wenxin Zhang, Zhengyang Qi, Maarten Sap, Graham Neubig, Yonatan Bisk, Hao Zhu
*The 62nd Annual Meeting of the Association for Computational Linguistics*

30 **OpenEQA: Embodied Question Answering in the Era of Foundation Models** 2024
Arjun Majumdar, Anurag Ajay, Xiaohan Zhang, Pranav Putta, Sriram Yenamandra, Mikael Henaff, Sneha Silwal, Paul Mcvay, Oleksandr Maksymets, Sergio Arnaud, Karmesh Yadav, Qiyang Li, Ben Newman, Mohit Sharma, Vincent Berges, Shiqi Zhang, Pulkit Agrawal, Yonatan Bisk, Dhruv Batra, Mrinal Kalakrishnan, Franziska Meier, Chris Paxton, Sasha Sax, Aravind Rajeswaran
*Conference on Computer Vision and Pattern Recognition*

31 **SOTOPIA: Interactive Evaluation for Social Intelligence in Language Agents** 2024
Xuhui Zhou, Hao Zhu, Leena Mathur, Ruohong Zhang, Haofei Yu, Zhengyang Qi, Louis-Philippe Morency, Yonatan Bisk, Daniel Fried, Graham Neubig, Maarten Sap
*The Twelfth International Conference on Learning Representations (Spotlight)*

32 **Open X-Embodiment: Robotic Learning Datasets and RT-X Models: Open X-Embodiment Collaboration** 2024
about 300 people... including me and Vidhi
*IEEE International Conference on Robotics and Automation (ICRA)*

33 **MOSAIC: Learning Unified Multi-Sensory Object Property Representations for Robot Perception** 2024
Gyan Tatiya, Jonathan Francis, Ho-Hsiang Wu, Yonatan Bisk, Jivko Sinapov
*IEEE International Conference on Robotics and Automation*

34 **WebArena: A Realistic Web Environment for Building Autonomous Agents** 2024
Shuyan Zhou, Frank F. Xu, Hao Zhu, Xuhui Zhou, Robert Lo, Abishek Sridhar, Xianyi Cheng, Tianyue Ou, Yonatan Bisk, Daniel Fried, Uri Alon, Graham Neubig
*The Twelfth International Conference on Learning Representations*

35 **Spatial-Language Attention Policies for Efficient Robot Learning** 2023
Priyam Parashar, Vidhi Jain, Xiaohan Zhang, Jay Vakil, Sam Powers, Yonatan Bisk, Chris Paxton
*Conference on Robot Learning*

36 **SPAE: Semantic Pyramid AutoEncoder for Multimodal Generation with Frozen LLMs** 2023
Lijun Yu, Yong Cheng, Zhiruo Wang, Vivek Kumar, Wolfgang Macherey, Yanping Huang, David A. Ross, Irfan Essa, Yonatan Bisk, Ming-Hsuan Yang, Kevin Murphy, Alexander Hauptmann, Lu Jiang
*Thirty-seventh Conference on Neural Information Processing Systems*

37 **HomeRobot: Open-Vocabulary Mobile Manipulation** 2023
Sriram Yenamandra, Arun Ramachandran, Karmesh Yadav, Austin Wang, Mukul Khanna, Theophile Gervet, Tsung-Yen Yang, Vidhi Jain, Alexander William Clegg, John Turner, Zsolt Kira, Manolis Savva, Angel Chang, Devendra Singh Chaplot, Dhruv Batra, Roozbeh Mottaghi, Yonatan Bisk, Chris Paxton
*Conference on Robot Learning*

38 **SPRING: GPT-4 Out-performs RL Algorithms by Studying Papers and Reasoning** 2023
Yue Wu, Shrimai Prabhumoye, So Yeon Min, Yonatan Bisk, Ruslan Salakhutdinov, Amos Azaria, Tom Mitchell, Yuanzhi Li
*Thirty-seventh Conference on Neural Information Processing Systems*

39 **Towards Open-World Mobile Manipulation in Homes: Lessons from the Neurips 2023 HomeRobot Open Vocabulary Mobile Manipulation Challenge** 2023
Sriram Yenamandra, Arun Ramachandran, Mukul Khanna, Karmesh Yadav, Jay Vakil, Andrew Melnik, Michael Büttner, Leon Harz, Lyon Brown, Gora Chand Nandi, Arjun PS, Gaurav Kumar Yadav, Rahul Kala, Robert Haschke, Yang Luo, Jinxin Zhu, Yansen Han, Bingyi Lu, Xuan Gu, Qinyuan Liu, Yaping Zhao, Qiting Ye, Chenxiao Dou, Yansong Chua, Volodymyr Kuzma, Vladyslav Humennyy, Ruslan Partsey, Jonathan Francis, Devendra Singh Chaplot, Gunjan Chhablani, Alexander Clegg, Theophile Gervet, Vidhi Jain, Ram Ramrakhya, Andrew Szot, Austin Wang, Tsung-Yen Yang, Aaron Edsinger, Charlie Kemp, Binit Shah, Zsolt Kira, Dhruv Batra, Roozbeh Mottaghi, Yonatan Bisk, Chris Paxton
*Thirty-seventh Conference on Neural Information Processing Systems: Competition Track*

40 **EXCALIBUR: Encouraging and Evaluating Embodied Exploration** 2023
Hao Zhu, Raghav Kapoor, So Yeon Min, Winson Han, Jiatai Li, Kaiwen Geng, Graham Neubig, Yonatan Bisk, Aniruddha Kembhavi, Luca Weihs
*Conference on Computer Vision and Pattern Recognition*

41 **The Framework Tax: Disparities Between Inference Efficiency in Research and Deployment** 2023
Jared Fernandez, Jacob Kahn, Clara Na, Yonatan Bisk, Emma Strubell
*The 2023 Conference on Empirical Methods in Natural Language Processing (Oral)*

42 **Computational Language Acquisition with Theory of Mind** 2023
Andy Liu, Hao Zhu, Emmy Liu, Yonatan Bisk, Graham Neubig
*The Eleventh International Conference on Learning Representations*

43 **Self-Supervised Object Goal Navigation with In-Situ Finetuning** 2023
So Yeon Min, Yao-Hung Hubert Tsai, Wei Ding, Ali Farhadi, Ruslan Salakhutdinov, Yonatan Bisk, Jian Zhang
*IEEE/RSJ International Conference on Intelligent Robots and Systems*

44 **Don't Copy the Teacher: Data and Model Challenges in Embodied Dialogue** 2022
So Yeon Min, Hao Zhu, Ruslan Salakhutdinov, Yonatan Bisk
*Conference on Empirical Methods in Natural Language Processing*

45 **EvEntS ReaLM: Event Reasoning of Entity States via Language Models** 2022
Evangelia Spiliopoulou, Artidoro Pagnoni, Yonatan Bisk, Eduard Hovy
*Conference on Empirical Methods in Natural Language Processing*

46 **On Advances in Text Generation from Images Beyond Captioning: A Case Study in Self-Rationalization** 2022
Shruti Palaskar, Akshita Bhagia, Yonatan Bisk, Florian Metze, Alan W Black, Ana Marasovic
*Findings of the Conference on Empirical Methods in Natural Language Processing*

47 **Transformers are Adaptable Task Planners** 2022
Vidhi Jain, Yixin Lin, Eric Undersander, Yonatan Bisk, Akshara Rai
*Conference on Robot Learning*

48 **Symmetric Machine Theory of Mind** 2022
Melanie Sclar, Graham Neubig, Yonatan Bisk
*39th International Conference on Machine Learning*

49 **A Framework for Learning to Request Rich and Contextually Useful Information from Humans** 2022
Khanh Nguyen, Yonatan Bisk, Hal Daume III
*39th International Conference on Machine Learning,*

50 **Simulated Language Learning from Communicative Goals and Linguistic Input** 2022
Hao Zhu, Yonatan Bisk, Graham Neubig
*Annual Meeting of the Cognitive Science Society (Oral)*

51 **HEAR 2021: Holistic Evaluation of Audio Representations** 2022
Joseph Turian, Jordie Shier, Humair Raj Khan, Bhiksha Raj, Björn W. Schuller, Christian J. Steinmetz, Colin Malloy, George Tzanetakis, Gissel Velarde, Kirk McNally, Max Henry, Nicolas Pinto, Camille Noufi, Christian Clough, Dorien Herremans, Eduardo Fonseca, Jesse Engel, Justin Salamon, Philippe Esling, Pranay Manocha, Shinji Watanabe, Zeyu Jin, Yonatan Bisk
*Proceedings of Machine Learning Research (PMLR): NeurIPS 2021 Competition Track*

52 **KAT: A Knowledge Augmented Transformer for Vision-and-Language** 2022
Liangke Gui, Borui Wang, Qiuyuan Huang, Alexander Hauptmann, Yonatan Bisk, Jianfeng Gao
*Annual Conference of the North American Chapter of the Association for Computational Linguistics (Oral)*

53 **FILM: Following Instructions in Language with Modular Methods** 2022
So Yeon Min, Devendra Singh Chaplot, Pradeep Ravikumar, Yonatan Bisk, Ruslan Salakhutdinov
*The Tenth International Conference on Learning Representations*

54 **WebQA: Multihop and Multimodal QA** 2022
Yingshan Chang, Mridu Narang, Hisami Suzuki, Guihong Cao, Jianfeng Gao, Yonatan Bisk
*Conference on Computer Vision and Pattern Recognition (Oral)*

55 **Dependency Induction Through the Lens of Visual Perception** 2021
Ruisi Su, Shruti Rijhwani, Hao Zhu, Junxian He, Xinyu Wang, Yonatan Bisk, Graham Neubig
*The SIGNLL Conference on Computational Natural Language Learning*

56 **Language Grounding with 3D Objects** 2021
Jesse Thomason, Mohit Shridhar, Yonatan Bisk, Chris Paxton, Luke Zettlemoyer
*Conference on Robot Learning*

57 **TACo: Token-aware Cascade Contrastive Learning for Video-Text Alignment** 2021
Jianwei Yang, Yonatan Bisk, Jianfeng Gao
*International Conference on Computer Vision*

58 **Few-shot Language Coordination by Modeling Theory of Mind** 2021
Hao Zhu, Graham Neubig, Yonatan Bisk
*The Thirty-eighth International Conference on Machine Learning*

59 **Grounding 'Grounding' in NLP** 2021
Khyathi Raghavi Chandu, Yonatan Bisk, Alan W Black
*Findings of The 2021 Conference of the Association for Computational Linguistics*

60 **An Empirical Study on the Generalization Power of Neural Representations Learned via Visual Guessing Games** 2021
Alessandro Suglia, Yonatan Bisk, Ioannis Konstas, Antonio Vergari, Emanuele Bastianelli, Andrea Vanzo, Oliver Lemon
*The 2021 Conference of the European Chapter of the Association for Computational Linguistics (Oral)*

61 **Knowledge-driven Data Construction for Zero-shot Evaluation in Commonsense Question Answering** 2021
Kaixin Ma, Filip Ilievski, Jonathan Francis, Yonatan Bisk, Eric Nyberg, Alessandro Oltramari
*35th AAAI Conference on Artificial Intelligence*

62 **ALFWorld: Aligning Text and Embodied Environments for Interactive Learning** 2021
Mohit Shridhar, Xingdi Yuan, Marc-Alexandre Côté, Yonatan Bisk, Adam Trischler, Matthew Hausknecht
*International Conference on Learning Representations*

63 **Imagining Grounded Conceptual Representations from Perceptual Information in Situated Guessing Games** 2020
Alessandro Suglia, Antonio Vergari, Ioannis Konstas, Yonatan Bisk, Emanuele Bastianelli, Andrea Vanzo, Oliver Lemon
*The 28th International Conference on Computational Linguistics (Oral)*

64 **Experience Grounds Language** 2020
Yonatan Bisk, Ari Holtzman, Jesse Thomason, Jacob Andreas, Yoshua Bengio, Joyce Chai, Mirella Lapata, Angeliki Lazaridou, Jonathan May, Aleksandr Nisnevich, Nicolas Pinto, Joseph Turian
*Conference on Empirical Methods in Natural Language Processing (Oral)*

65 **RMM: A Recursive Mental Model for Dialog Navigation** 2020
Homero Roman Roman, Yonatan Bisk, Jesse Thomason, Asli Celikyilmaz, Jianfeng Gao
*Conference on Empirical Methods in Natural Language Processing: Findings*

66 **ALFRED: A Benchmark for Interpreting Grounded Instructions for Everyday Tasks** 2020
Mohit Shridhar, Jesse Thomason, Daniel Gordon, Yonatan Bisk, Winson Han, Roozbeh Mottaghi, Luke Zettlemoyer, Dieter Fox
*The IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*

67 **PIQA: Reasoning about Physical Commonsense in Natural Language** 2020
Yonatan Bisk, Rowan Zellers, Ronan Le Bras, Jianfeng Gao, Yejin Choi
*Thirty-Fourth AAAI Conference on Artificial Intelligence (Oral)*

68 **Robust Navigation with Language Pretraining and Stochastic Sampling** 2019
Xiujun Li, Chunyuan Li, Qiaolin Xia, Yonatan Bisk, Asli Celikyilmaz, Jianfeng Gao, Noah A. Smith, Yejin Choi
*Conference on Empirical Methods in Natural Language Processing and 9th International Joint Conference on Natural Language Processing*

69 **Defending Against Neural Fake News** 2019
Rowan Zellers, Ari Holtzman, Hannah Rashkin, Yonatan Bisk, Ali Farhadi, Franziska Roesner, Yejin Choi
*Thirty-third Conference on Neural Information Processing Systems*

70 **Improving Robot Success Detection using Static Object Data** 2019
Rosario Scalise, Jesse Thomason, Yonatan Bisk, Siddhartha Srinivasa
*IEEE/RSJ International Conference on Intelligent Robots and Systems*

71 **Early Fusion for Goal Directed Robotic Vision** 2019
Aaron Walsman, Yonatan Bisk, Saadia Gabriel, Dipendra Misra, Yoav Artzi, Yejin Choi, Dieter Fox
*2019 IEEE/RSJ International Conference on Intelligent Robots and Systems*
– ***RoboCup Best Paper Award finalist***

72 **HellaSwag: Can a Machine Really Finish Your Sentence?** 2019
Rowan Zellers, Ari Holtzman, Yonatan Bisk, Ali Farhadi, Yejin Choi
*Association for Computational Linguistics*

73 **From Recognition to Cognition: Visual Commonsense Reasoning** 2019
Rowan Zellers, Yonatan Bisk, Ali Farhadi, Yejin Choi
*The IEEE Conference on Computer Vision and Pattern Recognition (Oral)*

74 **Tactical Rewind: Self-Correction via Backtracking in Vision-and-Language Navigation** 2019
Liyiming Ke, Xiujun Li, Yonatan Bisk, Ari Holtzman, Zhe Gan, Jingjing Liu, Jianfeng Gao, Yejin Choi, Siddhartha Srinivasa
*The IEEE Conference on Computer Vision and Pattern Recognition (Oral)*

75 **Prospection: Interpretable Plans From Language By Predicting the Future** 2019
Chris Paxton, Yonatan Bisk, Jesse Thomason, Arunkumar Byravan, Dieter Fox
*International Conference on Robotics and Automation (ICRA)*

76 **Shifting the Baseline: Single Modality Performance on Visual Navigation & QA** 2019
Jesse Thomason, Daniel Gordon, Yonatan Bisk
*Annual Conference of the North American Chapter of the Association for Computational Linguistics*

77 **Benchmarking Hierarchical Script Knowledge** 2019
Yonatan Bisk, Jan Buys, Karl Pichotta, Yejin Choi
*Annual Conference of the North American Chapter of the Association for Computational Linguistics (Oral)*

78 **Character-based Surprisal as a Model of Reading Difficulty in the Presence of Errors** 2019
Michael Hahn, Frank Keller, Yonatan Bisk, Yonatan Belinkov
*The 41st Annual Meeting of the Cognitive Science Society (Oral)*

79 **SWAG: A Large-Scale Adversarial Dataset for Grounded Commonsense Inference** 2018
Rowan Zellers, Yonatan Bisk, Roy Schwartz, Yejin Choi
*Conference on Empirical Methods in Natural Language Processing (Oral)*

80 **Synthetic and Natural Noise Both Break Neural Machine Translation** 2018
Yonatan Belinkov, Yonatan Bisk
*6th International Conference on Learning Representations (Oral)*

81 **Learning Interpretable Spatial Operations in a Rich 3D Blocks World** 2018
Yonatan Bisk, Kevin Shih, Yejin Choi, Daniel Marcu
*Thirty-Second Conference on Artificial Intelligence (AAAI-18)*

82 **Natural Language Inference from Multiple Premises** 2017
Alice Lai, Yonatan Bisk, Julia Hockenmaier
*Eighth International Joint Conference on Natural Language Processing (Oral)*

83 **Natural Language Communication with Robots** 2016
Yonatan Bisk, Deniz Yuret, Daniel Marcu
*15th Annual Conference of the North American Chapter of the Association for Computational Linguistics (Oral)*

84 **Supertagging with LSTMs** 2016
Ashish Vaswani, Yonatan Bisk, Kenji Sagae, Ryan Musa
*15th Annual Conference of the North American Chapter of the Association for Computational Linguistics (Short Papers) (Oral)*

85 **Evaluating Induced CCG Parsers on Grounded Semantic Parsing** 2016
Yonatan Bisk, Siva Reddy, John Blitzer, Julia Hockenmaier, Mark Steedman
*2016 Conference on Empirical Methods in Natural Language Processing*

86 **Probing the Linguistic Strengths and Limitations of Unsupervised Grammar Induction** 2015
Yonatan Bisk, Julia Hockenmaier
*53rd Annual Meeting of the Association for Computational Linguistics and the 7th International Joint Conference on Natural Language Processing (Volume 1: Long Papers) (Oral)*

87 **Labeled Grammar Induction with Minimal Supervision** 2015
Yonatan Bisk, Christos Christodoulopoulos, Julia Hockenmaier
*53rd Annual Meeting of the Association for Computational Linguistics and the 7th International Joint Conference on Natural Language Processing (Volume 2: Short Papers)*

88 **Simple Robust Grammar Induction with Combinatory Categorial Grammar** 2012
Yonatan Bisk, Julia Hockenmaier
*Twenty-Sixth Conference on Artificial Intelligence (AAAI-12)*

89 **Document-Topic Hierarchies from Document Graphs** 2012
Tim Weninger, Yonatan Bisk, Jiawei Han
*21st ACM international conference on Information and knowledge management (CIKM 2012)*

90 **Normal-form parsing for CCGs with generalized composition and type-raising** 2010
Julia Hockenmaier, Yonatan Bisk
*23rd International Conference on Computational Linguistics (Coling 2010)*

## Workshop Publications

91 **MAEA: Multimodal Attribution for Embodied AI** 2022
Vidhi Jain, Jayant Sravan Tamarapalli, Sahiti Yerramilli, Yonatan Bisk
*Progress and Challenges in Building Trustworthy Embodied AI at NeurIPS 2022*

92 **Tackling AlfWorld with Action Attention and Common Sense from Language Models** 2022
Yue Wu, So Yeon Min, Yonatan Bisk, Ruslan Salakhutdinov, Shrimai Prabhumoye
*Language and Reinforcement Learning Workshop at NeurIPS 2022*

93 **Worst of Both Worlds: Biases Compound in Pre-trained Vision-and-Language Models** 2022
Tejas Srinivasan, Yonatan Bisk
*4th Workshop on Gender Bias in Natural Language Processing*

94 **KB-VLP: Knowledge Based Vision and Language Pretraining** 2021
Kezhen Chen, Qiuyuan Huang, Yonatan Bisk, Daniel McDuff, Jianfeng Gao
*ICML21 Workshop on Self-Supervised Learning*

95 **A Benchmark for Structured Procedural Knowledge Extraction from Cooking Videos** 2020
Frank F. Xu, Lei Ji, Botian Shi, Junyi Du, Graham Neubig, Yonatan Bisk, Nan Duan
*Workshop on NLP Beyond Text*

96 **Inducing Grammars with and for Neural Machine Translation** 2018
Ke Tran, Yonatan Bisk
*2nd Workshop on Neural Machine Translation (Best Paper)*

97 **Bridging HMMs and RNNs through Architectural Transformations** 2018
Jan Buys, Yonatan Bisk, Yejin Choi
*32nd Conference on Neural Information Processing Systems (NIPS 2018), IRASL workshop*

98 **Towards a Dataset for Human Computer Communication via Grounded Language Acquisition** 2016
Yonatan Bisk, Daniel Marcu, William Wong
*AAAI 2016 Workshop on Symbiotic Cognitive Systems*

99 **Unsupervised Neural Hidden Markov Models** 2016
Ke Tran, Yonatan Bisk, Ashish Vaswani, Daniel Marcu, Kevin Knight
*Workshop on Structured Prediction for NLP (Oral)*

100 **Induction of Linguistic Structure with Combinatory Categorial Grammars** 2012
Yonatan Bisk, Julia Hockenmaier
*NAACL HLT Workshop on Induction of Linguistic Structure*

## Preprint Publications

101 **Looking beyond the next token** 2025
Abitha Thankaraj, Yiding Jiang, J. Zico Kolter, Yonatan Bisk
*ArXiv*

102 **Model Successor Functions** 2025
Yingshan Chang, Yonatan Bisk
*ArXiv*

103 **Self-Regulation and Requesting Interventions** 2025
So Yeon Min, Yue Wu, Jimin Sun, Max Kaufmann, Fahim Tajwar, Yonatan Bisk, Ruslan Salakhutdinov
*ArXiv*

104 **Embodied-RAG: General non-parametric Embodied Memory for Retrieval and Generation** 2024
Quanting Xie, So Yeon Min, Tianyi Zhang, Aarav Bajaj, Ruslan Salakhutdinov, Matthew Johnson-Roberson, Yonatan Bisk
*ArXiv*

105 **DegustaBot: Zero-Shot Visual Preference Estimation for Personalized Multi-Object Rearrangement** 2024
Benjamin A. Newman, Pranay Gupta, Kris Kitani, Yonatan Bisk, Henny Admoni, Chris Paxton
*ArXiv*

106 **Dialogue with Robots: Proposals for Broadening Participation and Research in the SLIVAR Community** 2024
Casey Kennington, Malihe Alikhani, Heather Pon-Barry, Katherine Atwell, Yonatan Bisk, Daniel Fried, Felix Gervits, Zhao Han, Mert Inan, Michael Johnston, Raj Korpan, Diane Litman, Matthew Marge, Cynthia Matuszek, Ross Mead, Shiwali Mohan, Raymond Mooney, Natalie Parde, Jivko Sinapov, Angela Stewart, Matthew Stone, Stefanie Tellex, Tom Williams
*ArXiv*

107 **Toward General-Purpose Robots via Foundation Models: A Survey and Meta-Analysis** 2023
Yafei Hu, Quanting Xie, Vidhi Jain, Jonathan Francis, Jay Patrikar, Nikhil Keetha, Seungchan Kim, Yaqi Xie, Tianyi Zhang, Shibo Zhao, Yu Quan Chong, Chen Wang, Katia Sycara, Matthew Johnson-Roberson, Dhruv Batra, Xiaolong Wang, Sebastian Scherer, Zsolt Kira, Fei Xia, Yonatan Bisk
*ArXiv*

108 **Reasoning about the Unseen for Efficient Outdoor Object Navigation** 2023
Quanting Xie, Tianyi Zhang, Kedi Xu, Matthew Johnson-Roberson, Yonatan Bisk
*ArXiv*

109 **Plan, Eliminate, and Track – Language Models are Good Teachers for Embodied Agents** 2023
Yue Wu, So Yeon Min, Yonatan Bisk, Ruslan Salakhutdinov, Amos Azaria, Yuanzhi Li, Tom Mitchell, Shrimai Prabhumoye
*ArXiv*

110 **Retrospectives on the Embodied AI Workshop** 2022
Matt Deitke, Dhruv Batra, Yonatan Bisk, Tommaso Campari, Angel X. Chang, Devendra Singh Chaplot, Changan Chen, Claudia Pérez D'Arpino, Kiana Ehsani, Ali Farhadi, Li Fei-Fei, Anthony Francis, Chuang Gan, Kristen Grauman, David Hall, Winson Han, Unnat Jain, Aniruddha Kembhavi, Jacob Krantz, Stefan Lee, Chengshu Li, Sagnik Majumder, Oleksandr Maksymets, Roberto Martín-Martín, Roozbeh Mottaghi, Sonia Raychaudhuri, Mike Roberts, Silvio Savarese, Manolis Savva, Mohit Shridhar, Niko Sünderhauf, Andrew Szot, Ben Talbot, Joshua B. Tenenbaum, Jesse Thomason, Alexander Toshev, Joanne Truong, Luca Weihs, Jiajun Wu
*ArXiv*

111 **Multi-View Learning for Vision-and-Language Navigation** 2020
Qiaolin Xia, Xiujun Li, Chunyuan Li, Yonatan Bisk, Zhifang Sui, Jianfeng Gao, Yejin Choi, Noah A. Smith
*ArXiv*

112 **FIND: Identifying Functionally and Structurally Important Features in Protein Sequences with Deep Neural Networks** 2019
Ranjani Murali, James Hemp, Victoria Orphan, Yonatan Bisk
*bioRxiv*

113 **Balancing Shared Autonomy with Human-Robot Communication** 2018
Rosario Scalise, Yonatan Bisk, Maxwell Forbes, Daqing Yi, Yejin Choi, Siddhartha Srinivasa
*ArXiv*

114 **CHALET: Cornell House Agent Learning Environment** 2018
Claudia Yan, Dipendra Misra, Andrew Bennett, Aaron Walsman, Yonatan Bisk, Yoav Artzi
*ArXiv Preprint 1801.07357*

## Thesis Committees

– **PhD** *Albert Yu* Raymond Mooney and Roberto Martín-Martín, UT Austin
– **PhD** *Huihan Liu* Yuke Zhu, UT Austin
– **PhD** *Mark Lee* Oliver Kroemer, CMU
– **PhD** *Seungchan Kim* Sebastian Scherer, CMU
– **PhD** *Brendon Boldt* David Mortensen, CMU
– **MSR** *Haochen Zhang* Wenshan Wang and Ji Zhang, CMU
2025 **PhD** *Liangke Gui* Alex Hauptmann, CMU
2025 **PhD** *Gabe Sarch* Katerina Fragkiadaki and Mike Tarr, CMU
2025 **PhD** *Nikolaos Gkanatsios* Katerina Fragkiadaki, CMU
2024 **PhD** *Xiaoyu Zhu* Alex Hauptmann, CMU
2024 **PhD** *Yijun Qian* Alex Hauptmann, CMU
2024 **PhD** *Jielin Qiu* Lei Li & Christos Faloutsos, CMU
2024 **PhD** *Nikita Srivatsan* Taylor Berg-Kirkpatrick, CMU

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| 2024 | **PhD** *Lijun Yu* | Alex Hauptmann, CMU |
| 2023 | **PhD** *Kaixin Ma* | Eric Nyberg, CMU |
| 2023 | **PhD** *Nicholas Botzer* | Tim Weninger, Notre Dame |
| 2023 | **PhD** *Naoki Otani* | Ed Hovy, CMU |
| 2023 | **PhD** *Dylan Ebert* | Ellie Pavlick, Brown |
| 2023 | **MSR** *Mateo Guaman Castro* | Sebastian Scherer, CMU |
| 2022 | **PhD** *Shikib Mehri* | Maxine Eskenazi, CMU |
| 2022 | **PhD** *Shruti Palaskar* | Alan Black and Florian Metze, CMU |
| 2022 | **PhD** *Evangelia Spiliopoulou* | Ed Hovy, CMU |
| 2022 | **PhD** *Dheeraj Rajagopal* | Ed Hovy, CMU |
| 2022 | **PhD** *Volkan Cirik* | Louis-Philippe Morency and Taylor Berg-Kirkpatrick, CMU |
| 2022 | **MLT** *Aishwarya Jadhav* | Katia Sycara, CMU |
| 2021 | **PhD** *Pengcheng Yin* | Graham Neubig, CMU |
| 2021 | **MLT** *Jing Wen* | Katerina Fragkiadaki, CMU |
| 2020 | **PhD** *Zihang Dai* | Yiming Yang, CMU |

## Teaching

| | | |
|---|---|---|
| 2025 | **11-851 Talking to Robots** | # Students: 38 , FA |
| – | **11-777 MultiModal Machine Learning** | # Students: 145 , SP |
| 2024 | **11-851 Talking to Robots** | # Students: 37 , FA |
| – | **11-777 MultiModal Machine Learning** *w/Daniel Fried* | # Students: 83 , FA |
| – | **11-777 MultiModal Machine Learning** | # Students: 135 , SP |
| 2023 | **11-851 Talking to Robots (created)** | # Students: 16 , FA |
| – | **11-767 On-Device Machine Learning** *w/Emma Strubell* | # Students: 69 , FA |
| – | **11-777 MultiModal Machine Learning** *w/Daniel Fried* | # Students: 107 , SP |
| 2022 | **11-767 On-Device Machine Learning** *w/Emma Strubell* | # Students: 42 , FA |
| – | **11-777 MultiModal Machine Learning** | # Students: 94 , SP |
| 2021 | **11-767 On-Device Machine Learning (co-created)** *w/Emma Strubell* | # Students: 31 , FA |
| – | **11-777 MultiModal Machine Learning** | # Students: 42 , SP |

## (Senior) Area Chair / Action Editor

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|---|---|---|
| 2026 | **AC: Conference on Language Modeling (COLM)** | *NLP* |
| 2025 | **AC: IEEE International Conference on Robotics and Automation (ICRA)** | *Robo* |
| – | **AC: Conference on Robot Learning (CoRL)** | *Robo* |
| – | **AC: Robotics: Science and Systems (RSS)** | *Robo* |
| – | **AC: Conference on Language Modeling (COLM)** | *NLP* |
| – | **SAE: ACL Rolling Review (ARR/EMNLP)** | *NLP* |
| – | **AC: International Conference on Machine Learning (ICML)** | *AI/ML* |
| – | **AE: Transactions on Machine Learning Research (TMLR)** | *AI/ML* |
| 2024 | **AC: Conference on Robot Learning (CoRL)** | *Robo* |
| – | **AC: Conference on Computer Vision and Pattern Recognition (CVPR)** | *CV* |
| – | **AC: International Conference on Learning Representations (ICLR)** | *AI/ML* |
| – | **AE: Transactions on Machine Learning Research (TMLR)** | *AI/ML* |
| – | **AC: European Chapter of the Association for Computational Linguistics (EACL)** | *NLP* |
| – | **SAE: ACL Rolling Review (ARR)** | *NLP* |
| 2023 | **AC: Neural Information Processing Systems (NeurIPS)** | *AI/ML* |

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|---|---|---|
| – | **AC: International Conference on Machine Learning (ICML)** | *AI/ML* |
| – | **AE: Transactions on Machine Learning Research (TMLR)** | *AI/ML* |
| – | **SAE: ACL Rolling Review (ARR)** | *NLP* |
| – | **Ethics Co-Chair: Association for Computational Linguistics (ACL)** | *NLP* |
| – | **SAC: Empirical Methods in Natural Language Proc (EMNLP)** | *NLP* |
| 2022 | **AC: International Conference on Learning Representations (ICLR)** | *AI/ML* |
| – | **AC: Neural Information Processing Systems (NeurIPS)** | *AI/ML* |
| – | **Senior MR: Association for the Advancement of Artificial Intelligence (AAAI)** | *AI/ML* |
| – | **AE: Transactions on Machine Learning Research (TMLR)** | *AI/ML* |
| – | **SAC: Empirical Methods in Natural Language Proc (EMNLP)** | *NLP* |
| – | **Senior AE: ACL Rolling Review (ARR)** | *NLP* |
| 2021 | **AC: International Conference on Learning Representations (ICLR)** | *AI/ML* |
| – | **AC: Neural Information Processing Systems (NeurIPS)** | *AI/ML* |
| – | **AC: Association for Computational Linguistics (ACL)** | *NLP* |
| – | **AC: Empirical Methods in Natural Language Proc (EMNLP)** | *NLP* |
| – | **AE: ACL Rolling Review (ARR)** | *NLP* |
| 2020 | **AC: Association for Computational Linguistics (ACL)** | *NLP* |
| – | **AC: Asia-Pacific chapter of the Assoc. for Computational Linguistics (AACL)** | *NLP* |
| – | **AC: Neural Information Processing Systems (NeurIPS)** | *AI/ML* |
| 2019 | **AC: Association for Computational Linguistics (ACL)** | *NLP* |
| 2018 | **AC: International Conference on Computational Linguistics** | *NLP* |
| 2016 | **AC: Conference on Lexical and Computational Semantics (*SEM)** | *NLP* |

## Reviewer

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|---|---|---|---|
| NLP | **ARR** | Association for Computational Linguistics Rolling Review | *2021* |
| | **ACL** | Association for Computational Linguistics | *2017, 2018* |
| | **CL** | Computational Linguistics Journal | *2017 – 2022* |
| | **CoLing** | International Conference on Computational Linguistics | *2016* |
| | **CoNLL** | Conference on Computational Natural Language Learning | *2016 – 2018* |
| | **EACL** | European Chapter of the Association for Computational Linguistics | *2014, 17, 20* |
| | **EMNLP** | Empirical Methods in Natural Language Processing | *2013 – 2020* |
| | – | Best Papers Awards Committee | *2024* |
| | **IJCNLP** | International Joint Conference on Natural Language Processing | *2017* |
| | **NAACL** | N. American Chapter of the Association for Computational Ling | *2016 – 2019* |
| | – | Best Papers Awards Committee | *2025* |
| | **NLE** | Natural Language Engineering Journal | *2016* |
| | ***SEM** | Joint Conference on Lexical and Computational Semantics | *2020* |
| | **TACL** | Transactions of the Assoc. for Computational Linguistics | *2019 – 2023* |
| Robo | **CoRL** | Conference on Robot Learning | *2019 – 2021,2023* |
| | **AURO** | Autonomous Robots | *2022* |
| | **RSS** | Robotics: Science and Systems | *2022, 2024* |
| | **HRI** | Human Robot Interaction | *2020 – 2025* |
| | **ICRA** | International Conference on Robotics and Automation | *2019,2023 – 25* |
| | **IJRR** | International Journal of Robotics Research | *2017* |
| | **IROS** | IEEE/RSJ International Conference on Intelligent Robots and Systems | *2019,23–24* |
| | **RA-L** | IEEE Robotics and Automation Letters | *2019,2023* |
| AI/ML | **AAAI** | Association for the Advancement of Artificial Intelligence | *2018, 2021* |

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| | **ICLR** | International Conference on Learning Representations | *'19 – '20,'25* |
| | **ICML** | International Conference on Machine Learning | *2019* |
| | **IJCAI** | International Joint Conference on Artificial Intelligence | *2019* |
| | **NeurIPS** | Neural Information Processing Systems | *2018 – 2019,2025* |
| | **T-PAMI** | Transactions on Pattern Analysis and Machine Intelligence | *2023 –* |
| CV | **CVPR** | Computer Vision and Pattern Recognition | *2020, 2023* |
| | **ICCV** | Internationsl Conference on Computer Vision | *2025* |
| | **WACV** | IEEE/CVF Winter Conference on Applications of Computer Vision | *2026* |

## Organization (Workshops and Conference)

2022 **Workshop** *Embodied AI Workshop – Challenge Organizer*
Computer Vision and Pattern Recognition

2021 **Workshop** *Embodied AI Workshop – Challenge Organizer*
Computer Vision and Pattern Recognition

2020 **Workshop** *Embodied Vision, Actions & Language Workshop*
European Conference on Computer Vision

– **Workshop** *Workshop on Dataset Curation and Security*
NeurIPS

2019 **Workshop** *Spatial Language Understanding and Grounded communication for Robotics*
North American Chapter of the Association for Computational Linguistics

2018 **Conference** *Social Media Chair*
North American Chapter of the Association for Computational Linguistics

– **Workshop** *Generalization in the Age of Deep Learning*
North American Chapter of the Association for Computational Linguistics

– **Workshop** *Wordplay: Reinformcent and Language Learning in Text-Based Games* NeurIPS

2017 **Conference** *Student Scholarship Chair and Student Volunteer Coordinator*
Conference on Empirical Methods in Natural Language Processing

– **Workshop** *Language Grounding for Robotics*
Conference of the Association for Computational Linguistics

## Invitations and Talks

2025 **Embodied Language: Evaluating LLMs in the Real World** 75th Anniversary of the Turing Test, Université du Québec à Montréal

**Spatial and Semantic Awareness in Embodied LMs** IVADO 1st Workshop: Assessing and Improving the Capabilities and Safety of Agents, Montreal

**Guiding and Calibrating LLMs** Apple Workshop on Human-Centered Machine Learning

**Semantic Spaces and VLM limitations** Stanford Vision and Learning Lab (SVL)

**Following Instructions and Asking Questions** Army Research Lab

**Why is language an embodied problem?** UK Robotics Summer School Edinburgh

**Planning, Reasoning, and Generalization: A title too bold for me to actually deliver on** JP Morgan AI Agents Seminar

**Semantics? Reasoning? Can we define either of those terms?** RSS Workshop: 2nd Workshop on Semantic Reasoning and Goal Understanding in Robotics

**Humans Know Things, Humans Get in the Way** RSS Workshop: Continual Robot Learning from Humans

**Simulating People with Language Models – Good Idea? Bad Idea?** RSS Workshop: GenAI-HRI

**AI: Powerful and Limited** Next Gen Philanthropy

2024 **Talking to Robots** University Pennsylvania

**Everything Fails, Everything is Ambiguous** RSS Social Intelligence Workshop
**Do It Like This, and Don't Wake the Baby** RSS Task Specification Workshop
University of Maryland, College Park

2023 **Are We Really Talking to Robots?** "Dialogue with Robots" workshop, UPitt NSF Workshop
**Words ≠ language** Articulate Robots: Utilizing Language for Robot Learning RSS Workshop
**Following Instructions and Asking Questions** *Learning by Asking for Intelligent Robots and Agents* RO-MAN Workshop
**Following Instructions and Asking Questions** Goal Conditioned RL Workshop @ NeurIPS

2022 **Can we *really* connect language to robotics?** *CoRL Wksp on Language and Robot Learning*
**How machines learn language: Useful but wrong?** *12th Inter. Wksp on Language Production*
**Following Instructions and Asking Questions** *Univ of Potsdam*
*Univ California Santa Barbara NLP*
*Georgia Tech NLP*
*Microsoft Research NYC*
*Penn State University*
*Universitat Hamburg* Crossmodal Learning (CML) summer school
*University of Stuttgart* Institute of Natural Language Processing
*University of Pittsburgh NLP*

2021 *Univ of Illinois at Urbana-Champaign NLP*
*Human Interaction for Robotic Navigation Workshop @ Inter. Conference on Computer Vision*
**WebQA: Multihop and Multimodal QA** *PNNL Mega-AI Seminar*
**WebQA: Multihop and Multimodal** *Microsoft Research Summit*
**2nd Workshop on Advances in Language and Vision Research (ALVR)** *NAACL*
**Instructions, Abstraction, and Theory-of-Mind** *Koç University AI center*
**Understanding the Potential of Scaling Artificial Intelligence for Science Applications Panel** *Pacific Northwest National Lab*
**Guest Lecture: Embodiment for NLP** *Univ of Pennsylvania*
**Guest Lecture: Multimodality in NLP** *UWashington Linguistics*

2020 **The 2nd Workshop Beyond Vision and Language: Integrating Real-world Knowledge** *CoLing*
**The University of Texas at Austin – Forum for AI**
**Cornell Learning Machines seminar**
**Stanford NLP seminar**
**SRI Center for Vision Technology Lab Panel** *Embodied AI*

2018 **Colloquium Talk** *Northwest NLP*

2017 **Invited Talk** *University of Notre Dame NLP Seminar*
**Invited Talk** *University of California, Irvine AI/ML Seminar*
**Invited Talk** *Pacific Northwest National Laboratory*

2016 **Invited Poster** *The Impact of Computing in Our Physical World session of the CRA's Computing Community Consortium (CCC) Symposium on Computing Research*

2015 **Colloquium Talk** *Toyota Tech. Inst. of Chicago's Midwest Speech & Language Days*

2013 **Colloquium Talk** *Toyota Tech. Inst. of Chicago's Midwest Speech & Language Days*