

# Yonatan Bisk

Assistant Professor of Computer Science

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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 & Rozbeh Mottaghi  
2021 – **Consulting Professor** Microsoft Research  
2019 – **Visiting Researcher** Microsoft Research w/ Jianfeng Gao  
2017 – **Postdoctoral Scholar** w/ Yejin Choi  
University of Washington & Allen Institute for Artificial Intelligence  
2015 – **Postdoctoral Scholar** w/ Daniel Marcu  
Information Sciences Institute, University of Southern California

## 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

PhD	<b>Jared Fernandez</b>	he/him	<i>Efficiency</i>
PhD	<b>Yingshan Chang</b>	she/her	<i>Generalization</i>
PhD	<b>Abitha Thankaraj</b>	she/her	<i>Planning</i>
PhD	<b>Rosa Vitiello</b>	she/her	<i>Collaboration</i>
PhD	<b>Quanting Xie</b>	he/him	<i>Manipulation</i>
PhD	<b>Leena Mathur</b>	she/her	<i>Social Intelligence</i>
PhD	<b>Haochen Zhang</b>	she/her	<i>Incoming</i>
PhD	<b>Annabella Macaluso</b>	she/her	<i>Incoming</i>
PhD	<b>Wenjie Li</b>	she/her	<i>Incoming</i>

## TalkingToRobots.com

(co- <i>Emma Strubell</i> )	LTI	2020 –
	LTI	2022 –
	CSD	2024 –
(co- <i>Carolyn Rose</i> )	LTI	2024 –
	RI	2024 –
(co- <i>LP Morency</i> )	LTI	2024 –
	RI	2025 –
	RI	2025 –
	NI	2024 –

## Masters

MSR	<b>Jacob Thompson</b>	he/him	<i>Generalist Agents</i>
MSR	<b>Yash Jangir</b>	he/him	<i>Robust Policies</i>
5th	<b>Claire Jin</b>	she/her	<i>Embodied Dialogue</i>

## Alumni

PhD

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

### MS

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

### Interns and Undergraduates

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

### Capstones

MCDS	<b>VR Robot Teleop</b>	Sophia Huang	Jensen (Yi-Che) Huang	Tianyi Cheng	2024
MSAII	<b>Seed emergence</b>	Harini Subramanyan	Juanyun Mai	Ameya Morbale	2024
		Karthik Natarajan	Noel D Souza	Bohao Zhang	
MRSD	<b>Assistive Robotics for Eldercare (*co-Z Erickson)</b>	Abhinav Gupta	he/him	Atharva Pusalkar	2023
		Praveen Venkatesh	he/him	Shaolin Kataria	he/him
		Shivam Tripathy	he/him		he/him
MRSD	<b>Modular Teleop with Autonomy (*co-Z Erickson)</b>	Jashkumar Diyora	he/him	Shruti Gangopadhyay	2022
		Jigar Patel	he/him	Prakhar Pradeep	he/him
		Shivani Sivakumar	she/her		she/her
MCDS	<b>Embodied Navigation and Interaction</b>	Adhokshaja Madhwaraj	he/him	Kushagra Mahajan	2022
		Sai Vishwas Padigi	he/him	Vineeth Reddy	he/him
		Malaika Vijay	she/her	Zheng (Jessica) Zhong	she/her
MCDS	<b>Embodied Dialogue and ToM</b>	Xinyue Chen	she/her	Nikhil Gupta	2022
		Benny Jiang	he/him	Shubham Phal	he/him
		Prasoon Varshney	he/him		he/him
MCDS	<b>Novel Concept Learning</b>	Bharani Ujjaini Kempaiah	she/her	Linyi Li	2022

MSAII	<b>Visual Patent Search</b>				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 **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*
- 2 **MotIF: Motion Instruction Fine-tuning** 2025  
Minyoung Hwang, Joey Hejna, Dorsa Sadigh, Yonatan Bisk  
*IEEE Robotics and Automation Letters*
- 3 **Training Vision-Language Transformers from Captions** 2023  
Liangke Gui, Yingshan Chang, Qiuyuan Huang, Subhajit Som, Alexander Hauptmann, Jianfeng Gao, Yonatan Bisk  
*Transactions on Machine Learning Research*
- 4 **The Return of Lexical Dependencies: Neural Lexicalized PCFGs** 2020  
Hao Zhu, Yonatan Bisk, Graham Neubig  
*Transactions of the Association for Computational Linguistics*
- 5 **An HDP Model for Inducing Combinatory Categorial Grammars** 2013  
Yonatan Bisk, Julia Hockenmaier  
*Transactions of the Association for Computational Linguistics*

## Conference Publications

- 6 **REM: Evaluating LLM Embodied Spatial Reasoning through Multi-Frame Trajectories** 2025  
Jacob Thompson, Emiliano Garcia-Lopez, Yonatan Bisk  
*Second Conference on Language Modeling*
- 7 **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*
- 8 **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*
- 9 **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*
- 10 **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*
- 11 **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*
- 12 **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*

13	<b>ANAVI: Audio Noise Awareness using Visuals of Indoor environments for NAVigation</b> Vidhi Jain, Rishi Veerapaneni, <u>Yonatan Bisk</u> <i>Conference on Robot Learning</i>	2024
14	<b>Situated Instruction Following</b> So Yeon Min, Xavi Puig, Devendra Singh Chaplot, Tsung-Yen Yang, Akshara Rai, Priyam Parashar, Ruslan Salakhutdinov, <u>Yonatan Bisk</u> , Roozbeh Mottaghi <i>European Conference on Computer Vision</i>	2024
15	<b>Gradient Localization Improves Lifelong Pretraining of Language Models</b> Jared Fernandez, <u>Yonatan Bisk</u> , Emma Strubell <i>Findings of the Conference on Empirical Methods in Natural Language Processing</i>	2024
16	<b>How to Train Your Fact Verifier: Knowledge Transfer with Multimodal Open Models</b> Jaeyoung Lee, Ximing Lu, Jack Hessel, Faeze Brahman, Youngjae Yu, <u>Yonatan Bisk</u> , Yejin Choi, Saadia Gabriel <i>Findings of the Conference on Empirical Methods in Natural Language Processing</i>	2024
17	<b>Tools Fail: Detecting Silent Errors in Faulty Tools</b> Jimin Sun, So Yeon Min, Yingshan Chang, <u>Yonatan Bisk</u> <i>Conference on Empirical Methods in Natural Language Processing</i>	2024
18	<b>Language Models Need Inductive Biases to Count Inductively</b> Yingshan Chang, <u>Yonatan Bisk</u> <i>The Thirteenth International Conference on Learning Representations</i>	2025
19	<b>DiffusionPID: Interpreting Diffusion via Partial Information Decomposition</b> Shaurya Dewan, Rushikesh Zawar, Prakanshul Saxena, Yingshan Chang, Andrew Luo, <u>Yonatan Bisk</u> <i>Thirty-Eighth Annual Conference on Neural Information Processing Systems</i>	2024
20	<b>VISREAS: Complex Visual Reasoning with Unanswerable Questions</b> Syeda Nahida Akter, Sangwu Lee, Yingshan Chang, <u>Yonatan Bisk</u> , Eric Nyberg <i>Findings of the 62nd Annual Meeting of the Association for Computational Linguistics</i>	2024
21	<b>AgentKit: Flow Engineering with Graphs, not Coding</b> Yue Wu, Yewen Fan, So Yeon Min, Shrimai Prabhumoye, Stephen McAleer, <u>Yonatan Bisk</u> , Ruslan Salakhutdinov, Yuanzhi Li, Tom Mitchell <i>Conference on Language Modeling</i>	2024
22	<b>Skews in the Phenomenon Space Hinder Generalization in Text-to-Image Generation</b> Yingshan Chang, Yasi Zhang, Zhiyuan Fang, Yingnian Wu, <u>Yonatan Bisk</u> , Feng Gao <i>European Conference on Computer Vision</i>	2024
23	<b>Direct Preference Optimization of Video Large Multimodal Models from Language Model Reward</b> Ruohong Zhang, Liangke Gui, Zhiqing Sun, Yihao Feng, Keyang Xu, Yuanhan Zhang, Di Fu, Chunyuan Li, Alexander Hauptmann, <u>Yonatan Bisk</u> , Yiming Yang <i>Annual Conference of the Nations of the Americas Chapter of the ACL</i>	2025
24	<b>Vid2Robot: End-to-end Video-conditioned Policy Learning with Cross-Attention Transformers</b> Vidhi Jain, Maria Attarian, Nikhil J Joshi, Ayzaan Wahid, Danny Driess, Quan Vuong, Pannag R Sanketi, Pierre Sermanet, Stefan Welker, Christine Chan, Igor Gilitschenski, <u>Yonatan Bisk</u> , Debidatta Dwibedi <i>Robotics: Science and Systems</i>	2024
25	<b>SOTOPIA-π: Interactive Learning of Socially Intelligent Language Agents</b> Ruiyi Wang, Haofei Yu, Wenxin Zhang, Zhengyang Qi, Maarten Sap, Graham Neubig, <u>Yonatan Bisk</u> , Hao Zhu <i>The 62nd Annual Meeting of the Association for Computational Linguistics</i>	2024

26	<b>OpenEQA: Embodied Question Answering in the Era of Foundation Models</b> 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, <u>Yonatan Bisk</u> , Dhruv Batra, Mrinal Kalakrishnan, Franziska Meier, Chris Paxton, Sasha Sax, Aravind Rajeswaran <i>Conference on Computer Vision and Pattern Recognition</i>	2024
27	<b>SOTPIA: Interactive Evaluation for Social Intelligence in Language Agents</b> Xuhui Zhou, Hao Zhu, Leena Mathur, Ruohong Zhang, Haofei Yu, Zhengyang Qi, Louis-Philippe Morency, <u>Yonatan Bisk</u> , Daniel Fried, Graham Neubig, Maarten Sap <i>The Twelfth International Conference on Learning Representations (Spotlight)</i>	2024
28	<b>Open X-Embodiment: Robotic Learning Datasets and RT-X Models: Open X-Embodiment Collaboration</b> about 300 people... including me and Vidhi <i>IEEE International Conference on Robotics and Automation (ICRA)</i>	2024
29	<b>MOSAIC: Learning Unified Multi-Sensory Object Property Representations for Robot Perception</b> Gyan Tatiya, Jonathan Francis, Ho-Hsiang Wu, <u>Yonatan Bisk</u> , Jivko Sinapov <i>IEEE International Conference on Robotics and Automation</i>	2024
30	<b>WebArena: A Realistic Web Environment for Building Autonomous Agents</b> Shuyan Zhou, Frank F. Xu, Hao Zhu, Xuhui Zhou, Robert Lo, Abishek Sridhar, Xianyi Cheng, Tianyue Ou, <u>Yonatan Bisk</u> , Daniel Fried, Uri Alon, Graham Neubig <i>The Twelfth International Conference on Learning Representations</i>	2024
31	<b>Spatial-Language Attention Policies for Efficient Robot Learning</b> Priyam Parashar, Vidhi Jain, Xiaohan Zhang, Jay Vakil, Sam Powers, <u>Yonatan Bisk</u> , Chris Paxton <i>Conference on Robot Learning</i>	2023
32	<b>SPAE: Semantic Pyramid AutoEncoder for Multimodal Generation with Frozen LLMs</b> Lijun Yu, Yong Cheng, Zhiruo Wang, Vivek Kumar, Wolfgang Macherey, Yanping Huang, David A. Ross, Irfan Essa, <u>Yonatan Bisk</u> , Ming-Hsuan Yang, Kevin Murphy, Alexander Hauptmann, Lu Jiang <i>Thirty-seventh Conference on Neural Information Processing Systems</i>	2023
33	<b>HomeRobot: Open-Vocabulary Mobile Manipulation</b> 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, <u>Yonatan Bisk</u> , Chris Paxton <i>Conference on Robot Learning</i>	2023
34	<b>SPRING: GPT-4 Out-performs RL Algorithms by Studying Papers and Reasoning</b> Yue Wu, Shrimai Prabhumoye, So Yeon Min, <u>Yonatan Bisk</u> , Ruslan Salakhutdinov, Amos Azaria, Tom Mitchell, Yuanzhi Li <i>Thirty-seventh Conference on Neural Information Processing Systems</i>	2023
35	<b>Towards Open-World Mobile Manipulation in Homes: Lessons from the Neurips 2023 HomeRobot Open Vocabulary Mobile Manipulation Challenge</b> 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, <u>Yonatan Bisk</u> , Chris Paxton <i>Thirty-seventh Conference on Neural Information Processing Systems: Competition Track</i>	2023
36	<b>EXCALIBUR: Encouraging and Evaluating Embodied Exploration</b> Hao Zhu, Raghav Kapoor, So Yeon Min, Winson Han, Jiatai Li, Kaiwen Geng, Graham Neubig, <u>Yonatan Bisk</u> , Aniruddha Kembhavi, Luca Weihs <i>Conference on Computer Vision and Pattern Recognition</i>	2023

37	<b>The Framework Tax: Disparities Between Inference Efficiency in Research and Deployment</b>	2023
	Jared Fernandez, Jacob Kahn, Clara Na, <u>Yonatan Bisk</u> , Emma Strubell <i>The 2023 Conference on Empirical Methods in Natural Language Processing (Oral)</i>	
38	<b>Computational Language Acquisition with Theory of Mind</b>	2023
	Andy Liu, Hao Zhu, Emmy Liu, <u>Yonatan Bisk</u> , Graham Neubig <i>The Eleventh International Conference on Learning Representations</i>	
39	<b>Self-Supervised Object Goal Navigation with In-Situ Finetuning</b>	2023
	So Yeon Min, Yao-Hung Hubert Tsai, Wei Ding, Ali Farhadi, Ruslan Salakhutdinov, <u>Yonatan Bisk</u> , Jian Zhang <i>IEEE/RSJ International Conference on Intelligent Robots and Systems</i>	
40	<b>Don't Copy the Teacher: Data and Model Challenges in Embodied Dialogue</b>	2022
	So Yeon Min, Hao Zhu, Ruslan Salakhutdinov, <u>Yonatan Bisk</u> <i>Conference on Empirical Methods in Natural Language Processing</i>	
41	<b>EvEntS RealM: Event Reasoning of Entity States via Language Models</b>	2022
	Evangelia Spiliopoulou, Artidoro Pagnoni, <u>Yonatan Bisk</u> , Eduard Hovy <i>Conference on Empirical Methods in Natural Language Processing</i>	
42	<b>On Advances in Text Generation from Images Beyond Captioning: A Case Study in Self-Rationalization</b>	2022
	Shruti Palaskar, Akshita Bhagia, <u>Yonatan Bisk</u> , Florian Metze, Alan W Black, Ana Marasovic <i>Findings of the Conference on Empirical Methods in Natural Language Processing</i>	
43	<b>Transformers are Adaptable Task Planners</b>	2022
	Vidhi Jain, Yixin Lin, Eric Undersander, <u>Yonatan Bisk</u> , Akshara Rai <i>Conference on Robot Learning</i>	
44	<b>Symmetric Machine Theory of Mind</b>	2022
	Melanie Sclar, Graham Neubig, <u>Yonatan Bisk</u> <i>39th International Conference on Machine Learning</i>	
45	<b>A Framework for Learning to Request Rich and Contextually Useful Information from Humans</b>	2022
	Khanh Nguyen, <u>Yonatan Bisk</u> , Hal Daume III <i>39th International Conference on Machine Learning</i> ,	
46	<b>Simulated Language Learning from Communicative Goals and Linguistic Input</b>	2022
	Hao Zhu, <u>Yonatan Bisk</u> , Graham Neubig <i>Annual Meeting of the Cognitive Science Society (Oral)</i>	
47	<b>HEAR 2021: Holistic Evaluation of Audio Representations</b>	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, <u>Yonatan Bisk</u> <i>Proceedings of Machine Learning Research (PMLR): NeurIPS 2021 Competition Track</i>	
48	<b>KAT: A Knowledge Augmented Transformer for Vision-and-Language</b>	2022
	Liangke Gui, Borui Wang, Qiuyuan Huang, Alexander Hauptmann, <u>Yonatan Bisk</u> , Jianfeng Gao <i>Annual Conference of the North American Chapter of the Association for Computational Linguistics (Oral)</i>	
49	<b>FILM: Following Instructions in Language with Modular Methods</b>	2022
	So Yeon Min, Devendra Singh Chaplot, Pradeep Ravikumar, <u>Yonatan Bisk</u> , Ruslan Salakhutdinov <i>The Tenth International Conference on Learning Representations</i>	
50	<b>WebQA: Multihop and Multimodal QA</b>	2022
	Yingshan Chang, Mridu Narang, Hisami Suzuki, Guihong Cao, Jianfeng Gao, <u>Yonatan Bisk</u> <i>Conference on Computer Vision and Pattern Recognition (Oral)</i>	
51	<b>Dependency Induction Through the Lens of Visual Perception</b>	2021
	Ruisi Su, Shruti Rijhwani, Hao Zhu, Junxian He, Xinyu Wang, <u>Yonatan Bisk</u> , Graham Neubig <i>The SIGNLL Conference on Computational Natural Language Learning</i>	
52	<b>Language Grounding with 3D Objects</b>	2021
	Jesse Thomason, Mohit Shridhar, <u>Yonatan Bisk</u> , Chris Paxton, Luke Zettlemoyer <i>Conference on Robot Learning</i>	

53	<b>TACo: Token-aware Cascade Contrastive Learning for Video-Text Alignment</b> Jianwei Yang, Yonatan Bisk, Jianfeng Gao <i>International Conference on Computer Vision</i>	2021
54	<b>Few-shot Language Coordination by Modeling Theory of Mind</b> Hao Zhu, Graham Neubig, Yonatan Bisk <i>The Thirty-eighth International Conference on Machine Learning</i>	2021
55	<b>Grounding ‘Grounding’ in NLP</b> Khyathi Raghavi Chandu, Yonatan Bisk, Alan W Black <i>Findings of The 2021 Conference of the Association for Computational Linguistics</i>	2021
56	<b>An Empirical Study on the Generalization Power of Neural Representations Learned via Visual Guessing Games</b> Alessandro Suglia, Yonatan Bisk, Ioannis Konstas, Antonio Vergari, Emanuele Bastianelli, Andrea Vanzo, Oliver Lemon <i>The 2021 Conference of the European Chapter of the Association for Computational Linguistics (Oral)</i>	2021
57	<b>Knowledge-driven Data Construction for Zero-shot Evaluation in Commonsense Question Answering</b> Kaixin Ma, Filip Ilievski, Jonathan Francis, Yonatan Bisk, Eric Nyberg, Alessandro Oltramari <i>35th AAAI Conference on Artificial Intelligence</i>	2021
58	<b>ALFWorld: Aligning Text and Embodied Environments for Interactive Learning</b> Mohit Shridhar, Xingdi Yuan, Marc-Alexandre Côté, Yonatan Bisk, Adam Trischler, Matthew Hausknecht <i>International Conference on Learning Representations</i>	2021
59	<b>Imagining Grounded Conceptual Representations from Perceptual Information in Situated Guessing Games</b> Alessandro Suglia, Antonio Vergari, Ioannis Konstas, Yonatan Bisk, Emanuele Bastianelli, Andrea Vanzo, Oliver Lemon <i>The 28th International Conference on Computational Linguistics (Oral)</i>	2020
60	<b>Experience Grounds Language</b> Yonatan Bisk, Ari Holtzman, Jesse Thomason, Jacob Andreas, Yoshua Bengio, Joyce Chai, Mirella Lapata, Angeliki Lazaridou, Jonathan May, Aleksandr Nisnevich, Nicolas Pinto, Joseph Turian <i>Conference on Empirical Methods in Natural Language Processing (Oral)</i>	2020
61	<b>RMM: A Recursive Mental Model for Dialog Navigation</b> Homero Roman Roman, Yonatan Bisk, Jesse Thomason, Asli Celikyilmaz, Jianfeng Gao <i>Conference on Empirical Methods in Natural Language Processing: Findings</i>	2020
62	<b>ALFRED: A Benchmark for Interpreting Grounded Instructions for Everyday Tasks</b> Mohit Shridhar, Jesse Thomason, Daniel Gordon, Yonatan Bisk, Winson Han, Roozbeh Mottaghi, Luke Zettlemoyer, Dieter Fox <i>The IEEE Conference on Computer Vision and Pattern Recognition (CVPR)</i>	2020
63	<b>PIQA: Reasoning about Physical Commonsense in Natural Language</b> Yonatan Bisk, Rowan Zellers, Ronan Le Bras, Jianfeng Gao, Yejin Choi <i>Thirty-Fourth AAAI Conference on Artificial Intelligence (Oral)</i>	2020
64	<b>Robust Navigation with Language Pretraining and Stochastic Sampling</b> Xiuju Li, Chunyuan Li, Qiaolin Xia, Yonatan Bisk, Asli Celikyilmaz, Jianfeng Gao, Noah A. Smith, Yejin Choi <i>Conference on Empirical Methods in Natural Language Processing and 9th International Joint Conference on Natural Language Processing</i>	2019
65	<b>Defending Against Neural Fake News</b> Rowan Zellers, Ari Holtzman, Hannah Rashkin, Yonatan Bisk, Ali Farhadi, Franziska Roesner, Yejin Choi <i>Thirty-third Conference on Neural Information Processing Systems</i>	2019
66	<b>Improving Robot Success Detection using Static Object Data</b> Rosario Scalise, Jesse Thomason, Yonatan Bisk, Siddhartha Srinivasa <i>IEEE/RSJ International Conference on Intelligent Robots and Systems</i>	2019

67	<b>Early Fusion for Goal Directed Robotic Vision</b> Aaron Walsman, <u>Yonatan Bisk</u> , Saadia Gabriel, Dipendra Misra, Yoav Artzi, Yejin Choi, Dieter Fox <i>2019 IEEE/RSJ International Conference on Intelligent Robots and Systems</i> – <i>RoboCup Best Paper Award finalist</i>	2019
68	<b>HellaSwag: Can a Machine Really Finish Your Sentence?</b> Rowan Zellers, Ari Holtzman, <u>Yonatan Bisk</u> , Ali Farhadi, Yejin Choi <i>Association for Computational Linguistics</i>	2019
69	<b>From Recognition to Cognition: Visual Commonsense Reasoning</b> Rowan Zellers, <u>Yonatan Bisk</u> , Ali Farhadi, Yejin Choi <i>The IEEE Conference on Computer Vision and Pattern Recognition (Oral)</i>	2019
70	<b>Tactical Rewind: Self-Correction via Backtracking in Vision-and-Language Navigation</b> Liyiming Ke, Xiujun Li, <u>Yonatan Bisk</u> , Ari Holtzman, Zhe Gan, Jingjing Liu, Jianfeng Gao, Yejin Choi, Siddhartha Srinivasa <i>The IEEE Conference on Computer Vision and Pattern Recognition (Oral)</i>	2019
71	<b>Prospection: Interpretable Plans From Language By Predicting the Future</b> Chris Paxton, <u>Yonatan Bisk</u> , Jesse Thomason, Arunkumar Byravan, Dieter Fox <i>International Conference on Robotics and Automation (ICRA)</i>	2019
72	<b>Shifting the Baseline: Single Modality Performance on Visual Navigation &amp; QA</b> Jesse Thomason, Daniel Gordon, <u>Yonatan Bisk</u> <i>Annual Conference of the North American Chapter of the Association for Computational Linguistics</i>	2019
73	<b>Benchmarking Hierarchical Script Knowledge</b> <u>Yonatan Bisk</u> , Jan Buys, Karl Pichotta, Yejin Choi <i>Annual Conference of the North American Chapter of the Association for Computational Linguistics (Oral)</i>	2019
74	<b>Character-based Surprisal as a Model of Reading Difficulty in the Presence of Errors</b> Michael Hahn, Frank Keller, <u>Yonatan Bisk</u> , Yonatan Belinkov <i>The 41st Annual Meeting of the Cognitive Science Society (Oral)</i>	2019
75	<b>SWAG: A Large-Scale Adversarial Dataset for Grounded Commonsense Inference</b> Rowan Zellers, <u>Yonatan Bisk</u> , Roy Schwartz, Yejin Choi <i>Conference on Empirical Methods in Natural Language Processing (Oral)</i>	2018
76	<b>Synthetic and Natural Noise Both Break Neural Machine Translation</b> <u>Yonatan Bisk</u> , <u>Yonatan Bisk</u> <i>6th International Conference on Learning Representations (Oral)</i>	2018
77	<b>Learning Interpretable Spatial Operations in a Rich 3D Blocks World</b> <u>Yonatan Bisk</u> , Kevin Shih, Yejin Choi, Daniel Marcu <i>Thirty-Second Conference on Artificial Intelligence (AAAI-18)</i>	2018
78	<b>Natural Language Inference from Multiple Premises</b> Alice Lai, <u>Yonatan Bisk</u> , Julia Hockenmaier <i>Eighth International Joint Conference on Natural Language Processing (Oral)</i>	2017
79	<b>Natural Language Communication with Robots</b> <u>Yonatan Bisk</u> , Deniz Yuret, Daniel Marcu <i>15th Annual Conference of the North American Chapter of the Association for Computational Linguistics (Oral)</i>	2016
80	<b>Supertagging with LSTMs</b> Ashish Vaswani, <u>Yonatan Bisk</u> , Kenji Sagae, Ryan Musa <i>15th Annual Conference of the North American Chapter of the Association for Computational Linguistics (Short Papers) (Oral)</i>	2016
81	<b>Evaluating Induced CCG Parsers on Grounded Semantic Parsing</b> <u>Yonatan Bisk</u> , Siva Reddy, John Blitzer, Julia Hockenmaier, Mark Steedman <i>2016 Conference on Empirical Methods in Natural Language Processing</i>	2016

82	<b>Probing the Linguistic Strengths and Limitations of Unsupervised Grammar Induction</b> <u>Yonatan Bisk, Julia Hockenmaier</u> <i>53rd Annual Meeting of the Association for Computational Linguistics and the 7th International Joint Conference on Natural Language Processing (Volume 1: Long Papers) (Oral)</i>	2015
83	<b>Labeled Grammar Induction with Minimal Supervision</b> <u>Yonatan Bisk, Christos Christodoulopoulos, Julia Hockenmaier</u> <i>53rd Annual Meeting of the Association for Computational Linguistics and the 7th International Joint Conference on Natural Language Processing (Volume 2: Short Papers)</i>	2015
84	<b>Simple Robust Grammar Induction with Combinatory Categorial Grammar</b> <u>Yonatan Bisk, Julia Hockenmaier</u> <i>Twenty-Sixth Conference on Artificial Intelligence (AAAI-12)</i>	2012
85	<b>Document-Topic Hierarchies from Document Graphs</b> <u>Tim Weninger, Yonatan Bisk, Jiawei Han</u> <i>21st ACM international conference on Information and knowledge management (CIKM 2012)</i>	2012
86	<b>Normal-form parsing for CCGs with generalized composition and type-raising</b> <u>Julia Hockenmaier, Yonatan Bisk</u> <i>23rd International Conference on Computational Linguistics (Coling 2010)</i>	2010

## Workshop Publications

87	<b>MAEA: Multimodal Attribution for Embodied AI</b> <u>Vidhi Jain, Jayant Sravan Tamarapalli, Sahiti Yerramilli, Yonatan Bisk</u> <i>Progress and Challenges in Building Trustworthy Embodied AI at NeurIPS 2022</i>	2022
88	<b>Tackling AlfWorld with Action Attention and Common Sense from Language Models</b> <u>Yue Wu, So Yeon Min, Yonatan Bisk, Ruslan Salakhutdinov, Shrimai Prabhumoye</u> <i>Language and Reinforcement Learning Workshop at NeurIPS 2022</i>	2022
89	<b>Worst of Both Worlds: Biases Compound in Pre-trained Vision-and-Language Models</b> <u>Tejas Srinivasan, Yonatan Bisk</u> <i>4th Workshop on Gender Bias in Natural Language Processing</i>	2022
90	<b>KB-VLP: Knowledge Based Vision and Language Pretraining</b> <u>Kezhen Chen, Qiuyuan Huang, Yonatan Bisk, Daniel McDuff, Jianfeng Gao</u> <i>ICML21 Workshop on Self-Supervised Learning</i>	2021
91	<b>A Benchmark for Structured Procedural Knowledge Extraction from Cooking Videos</b> <u>Frank F. Xu, Lei Ji, Botian Shi, Junyi Du, Graham Neubig, Yonatan Bisk, Nan Duan</u> <i>Workshop on NLP Beyond Text</i>	2020
92	<b>Inducing Grammars with and for Neural Machine Translation</b> <u>Ke Tran, Yonatan Bisk</u> <i>2nd Workshop on Neural Machine Translation (Best Paper)</i>	2018
93	<b>Bridging HMMs and RNNs through Architectural Transformations</b> <u>Jan Buys, Yonatan Bisk, Yejin Choi</u> <i>32nd Conference on Neural Information Processing Systems (NIPS 2018), IRASL workshop</i>	2018
94	<b>Towards a Dataset for Human Computer Communication via Grounded Language Acquisition</b> <u>Yonatan Bisk, Daniel Marcu, William Wong</u> <i>AAAI 2016 Workshop on Symbiotic Cognitive Systems</i>	2016
95	<b>Unsupervised Neural Hidden Markov Models</b> <u>Ke Tran, Yonatan Bisk, Ashish Vaswani, Daniel Marcu, Kevin Knight</u> <i>Workshop on Structured Prediction for NLP (Oral)</i>	2016
96	<b>Induction of Linguistic Structure with Combinatory Categorial Grammars</b> <u>Yonatan Bisk, Julia Hockenmaier</u> <i>NAACL HLT Workshop on Induction of Linguistic Structure</i>	2012

## Preprint Publications

97	<b>RobotArena <math>\infty</math>: Scalable Robot Benchmarking via Real-to-Sim Translation</b> Yash Jangir, Yidi Zhang, Kashu Yamazaki, Chenyu Zhang, Kuan-Hsun Tu, Tsung-Wei Ke, Lei Ke, <u>Yonatan Bisk</u> , Katerina Fragkiadaki <i>ArXiv</i>	2025
98	<b>RAVEN: Resilient Aerial Navigation via Open-Set Semantic Memory and Behavior Adaptation</b> Seungchan Kim, Omar Alama, Dmytro Kurdydyk, John Keller, Nikhil Keetha, Wenshan Wang, <u>Yonatan Bisk</u> , Sebastian Scherer <i>ArXiv</i>	2025
99	<b>Looking beyond the next token</b> Abitha Thankaraj, Yiding Jiang, J. Zico Kolter, <u>Yonatan Bisk</u> <i>ArXiv</i>	2025
100	<b>Model Successor Functions</b> Yingshan Chang, <u>Yonatan Bisk</u> <i>ArXiv</i>	2025
101	<b>Self-Regulation and Requesting Interventions</b> So Yeon Min, Yue Wu, Jimin Sun, Max Kaufmann, Fahim Tajwar, <u>Yonatan Bisk</u> , Ruslan Salakhutdinov <i>ArXiv</i>	2025
102	<b>Embodied-RAG: General non-parametric Embodied Memory for Retrieval and Generation</b> Quanting Xie, So Yeon Min, Tianyi Zhang, Aarav Bajaj, Ruslan Salakhutdinov, Matthew Johnson-Roberson, <u>Yonatan Bisk</u> <i>ArXiv</i>	2024
103	<b>DegustaBot: Zero-Shot Visual Preference Estimation for Personalized Multi-Object Rearrangement</b> Benjamin A. Newman, Pranay Gupta, Kris Kitani, <u>Yonatan Bisk</u> , Henny Admoni, Chris Paxton <i>ArXiv</i>	2024
104	<b>Dialogue with Robots: Proposals for Broadening Participation and Research in the SLIVAR Community</b> Casey Kennington, Malihe Alikhani, Heather Pon-Barry, Katherine Atwell, <u>Yonatan Bisk</u> , 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 <i>ArXiv</i>	2024
105	<b>Toward General-Purpose Robots via Foundation Models: A Survey and Meta-Analysis</b> 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, <u>Yonatan Bisk</u> <i>ArXiv</i>	2023
106	<b>Reasoning about the Unseen for Efficient Outdoor Object Navigation</b> Quanting Xie, Tianyi Zhang, Kedi Xu, Matthew Johnson-Roberson, <u>Yonatan Bisk</u> <i>ArXiv</i>	2023
107	<b>Plan, Eliminate, and Track – Language Models are Good Teachers for Embodied Agents</b> Yue Wu, So Yeon Min, <u>Yonatan Bisk</u> , Ruslan Salakhutdinov, Amos Azaria, Yuanzhi Li, Tom Mitchell, Shrimai Prabhumoye <i>ArXiv</i>	2023

108	<b>Retrospectives on the Embodied AI Workshop</b>	2022
	Matt Deitke, Dhruv Batra, <u>Yonatan Bisk</u> , 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 <i>ArXiv</i>	
109	<b>Multi-View Learning for Vision-and-Language Navigation</b>	2020
	Qiaolin Xia, Xiujun Li, Chunyuan Li, <u>Yonatan Bisk</u> , Zhifang Sui, Jianfeng Gao, Yejin Choi, Noah A. Smith <i>ArXiv</i>	
110	<b>FIND: Identifying Functionally and Structurally Important Features in Protein Sequences with Deep Neural Networks</b>	2019
	Ranjani Murali, James Hemp, Victoria Orphan, <u>Yonatan Bisk</u> <i>bioRxiv</i>	
111	<b>Balancing Shared Autonomy with Human-Robot Communication</b>	2018
	Rosario Scalise, <u>Yonatan Bisk</u> , Maxwell Forbes, Daqing Yi, Yejin Choi, Siddhartha Srinivasa <i>ArXiv</i>	
112	<b>CHALET: Cornell House Agent Learning Environment</b>	2018
	Claudia Yan, Dipendra Misra, Andrew Bennett, Aaron Walsman, <u>Yonatan Bisk</u> , Yoav Artzi <i>ArXiv Preprint 1801.07357</i>	

## Thesis Committees

-	<b>PhD Albert Yu</b>	Raymond Mooney and Roberto Martín-Martín, UT Austin
-	<b>PhD Huihan Liu</b>	Yuke Zhu, UT Austin
-	<b>PhD Mark Lee</b>	Oliver Kroemer, CMU
-	<b>PhD Seungchan Kim</b>	Sebastian Scherer, CMU
-	<b>PhD Brendon Boldt</b>	David Mortensen, CMU
-	<b>MSR Haochen Zhang</b>	Wenshan Wang and Ji Zhang, CMU
2025	<b>PhD Liangke Gui</b>	Alex Hauptmann, CMU
2025	<b>PhD Gabe Sarch</b>	Katerina Fragkiadaki and Mike Tarr, CMU
2025	<b>PhD Nikolaos Gkanatsios</b>	Katerina Fragkiadaki, CMU
2024	<b>PhD Xiaoyu Zhu</b>	Alex Hauptmann, CMU
2024	<b>PhD Yijun Qian</b>	Alex Hauptmann, CMU
2024	<b>PhD Jielin Qiu</b>	Lei Li & Christos Faloutsos, CMU
2024	<b>PhD Nikita Srivatsan</b>	Taylor Berg-Kirkpatrick, CMU
2024	<b>PhD Lijun Yu</b>	Alex Hauptmann, CMU
2023	<b>PhD Kaixin Ma</b>	Eric Nyberg, CMU
2023	<b>PhD Nicholas Botzer</b>	Tim Weninger, Notre Dame
2023	<b>PhD Naoki Otani</b>	Ed Hovy, CMU
2023	<b>PhD Dylan Ebert</b>	Ellie Pavlick, Brown
2023	<b>MSR Mateo Guaman Castro</b>	Sebastian Scherer, CMU
2022	<b>PhD Shikib Mehri</b>	Maxine Eskenazi, CMU
2022	<b>PhD Shruti Palaskar</b>	Alan Black and Florian Metze, CMU
2022	<b>PhD Evangelia Spiliopoulou</b>	Ed Hovy, CMU
2022	<b>PhD Dheeraj Rajagopal</b>	Ed Hovy, CMU
2022	<b>PhD Volkan Cirik</b>	Louis-Philippe Morency and Taylor Berg-Kirkpatrick, CMU
2022	<b>MLT Aishwarya Jadhav</b>	Katia Sycara, CMU
2021	<b>PhD Pengcheng Yin</b>	Graham Neubig, CMU

2021 **MLT** *Jing Wen*  
2020 **PhD** *Zihang Dai*

Katerina Fragkiadaki, CMU  
Yiming Yang, CMU

## Teaching

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

## (Senior) Area Chair / Action Editor

2025	<b>AC: IEEE International Conference on Robotics and Automation (ICRA)</b>	<i>Robo</i>
	- <b>AC: Conference on Robot Learning (CoRL)</b>	<i>Robo</i>
	- <b>AC: Robotics: Science and Systems (RSS)</b>	<i>Robo</i>
	- <b>AC: Conference on Language Modeling (COLM)</b>	<i>NLP</i>
	- <b>SAE: ACL Rolling Review (ARR/EMNLP)</b>	<i>NLP</i>
	- <b>AC: International Conference on Machine Learning (ICML)</b>	<i>AI/ML</i>
	- <b>AE: Transactions on Machine Learning Research (TMLR)</b>	<i>AI/ML</i>
2024	<b>AC: Conference on Robot Learning (CoRL)</b>	<i>Robo</i>
	- <b>AC: Conference on Computer Vision and Pattern Recognition (CVPR)</b>	<i>CV</i>
	- <b>AC: International Conference on Learning Representations (ICLR)</b>	<i>AI/ML</i>
	- <b>AE: Transactions on Machine Learning Research (TMLR)</b>	<i>AI/ML</i>
	- <b>AC: European Chapter of the Association for Computational Linguistics (EACL)</b>	<i>NLP</i>
	- <b>SAE: ACL Rolling Review (ARR)</b>	<i>NLP</i>
2023	<b>AC: Neural Information Processing Systems (NeurIPS)</b>	<i>AI/ML</i>
	- <b>AC: International Conference on Machine Learning (ICML)</b>	<i>AI/ML</i>
	- <b>AE: Transactions on Machine Learning Research (TMLR)</b>	<i>AI/ML</i>
	- <b>SAE: ACL Rolling Review (ARR)</b>	<i>NLP</i>
	- <b>Ethics Co-Chair: Association for Computational Linguistics (ACL)</b>	<i>NLP</i>
	- <b>SAC: Empirical Methods in Natural Language Proc (EMNLP)</b>	<i>NLP</i>
2022	<b>AC: International Conference on Learning Representations (ICLR)</b>	<i>AI/ML</i>
	- <b>AC: Neural Information Processing Systems (NeurIPS)</b>	<i>AI/ML</i>
	- <b>Senior MR: Association for the Advancement of Artificial Intelligence (AAAI)</b>	<i>AI/ML</i>
	- <b>AE: Transactions on Machine Learning Research (TMLR)</b>	<i>AI/ML</i>
	- <b>SAC: Empirical Methods in Natural Language Proc (EMNLP)</b>	<i>NLP</i>
	- <b>Senior AE: ACL Rolling Review (ARR)</b>	<i>NLP</i>
2021	<b>AC: International Conference on Learning Representations (ICLR)</b>	<i>AI/ML</i>
	- <b>AC: Neural Information Processing Systems (NeurIPS)</b>	<i>AI/ML</i>
	- <b>AC: Association for Computational Linguistics (ACL)</b>	<i>NLP</i>
	- <b>AC: Empirical Methods in Natural Language Proc (EMNLP)</b>	<i>NLP</i>
	- <b>AE: ACL Rolling Review (ARR)</b>	<i>NLP</i>

2020	<b>AC: Association for Computational Linguistics (ACL)</b>	NLP
-	<b>AC: Asia-Pacific chapter of the Assoc. for Computational Linguistics (AAACL)</b>	NLP
-	<b>AC: Neural Information Processing Systems (NeurIPS)</b>	AI/ML
2019	<b>AC: Association for Computational Linguistics (ACL)</b>	NLP
2018	<b>AC: International Conference on Computational Linguistics</b>	NLP
2016	<b>AC: Conference on Lexical and Computational Semantics (*SEM)</b>	NLP

## Reviewer

NLP	<b>ARR</b>	Association for Computational Linguistics Rolling Review	2021
	<b>ACL</b>	Association for Computational Linguistics	2017, 2018
	<b>CL</b>	Computational Linguistics Journal	2017 – 2022
	<b>CoLing</b>	International Conference on Computational Linguistics	2016
	<b>CoNLL</b>	Conference on Computational Natural Language Learning	2016 – 2018
	<b>EACL</b>	European Chapter of the Association for Computational Linguistics	2014, 17, 20
	<b>EMNLP</b>	Empirical Methods in Natural Language Processing	2013 – 2020
	-	Best Papers Awards Committee	2024
	<b>IJCNLP</b>	International Joint Conference on Natural Language Processing	2017
	<b>NAACL</b>	N. American Chapter of the Association for Computational Ling	2016 – 2019
	-	Best Papers Awards Committee	2025
	<b>NLE</b>	Natural Language Engineering Journal	2016
	<b>*SEM</b>	Joint Conference on Lexical and Computational Semantics	2020
	<b>TACL</b>	Transactions of the Assoc. for Computational Linguistics	2019 – 2023
Robo	<b>CoRL</b>	Conference on Robot Learning	2019 – 2021,2023
	<b>AURO</b>	Autonomous Robots	2022
	<b>RSS</b>	Robotics: Science and Systems	2022, 2024
	<b>HRI</b>	Human Robot Interaction	2020 – 2025
	<b>ICRA</b>	International Conference on Robotics and Automation	2019,2023 – 25
	<b>IJRR</b>	International Journal of Robotics Research	2017
	<b>IROS</b>	IEEE/RSJ International Conference on Intelligent Robots and Systems	2019,23–24
	<b>RA-L</b>	IEEE Robotics and Automation Letters	2019,2023
AI/ML	<b>AAAI</b>	Association for the Advancement of Artificial Intelligence	2018, 2021
	<b>ICLR</b>	International Conference on Learning Representations	'19 – '20,'25
	<b>ICML</b>	International Conference on Machine Learning	2019
	<b>IJCAI</b>	International Joint Conference on Artificial Intelligence	2019
	<b>NeurIPS</b>	Neural Information Processing Systems	2018 – 2019,2025
	<b>T-PAMI</b>	Transactions on Pattern Analysis and Machine Intelligence	2023 –
CV	<b>CVPR</b>	Computer Vision and Pattern Recognition	2020, 2023
	<b>ICCV</b>	Internationsl Conference on Computer Vision	2025
	<b>WACV</b>	IEEE/CVF Winter Conference on Applications of Computer Vision	2026

## Organization (Workshops and Conference)

2022	<b>Workshop</b> <i>Embodied AI Workshop – Challenge Organizer</i> Computer Vision and Pattern Recognition
2021	<b>Workshop</b> <i>Embodied AI Workshop – Challenge Organizer</i> Computer Vision and Pattern Recognition
2020	<b>Workshop</b> <i>Embodied Vision, Actions &amp; Language Workshop</i> European Conference on Computer Vision
-	<b>Workshop</b> <i>Workshop on Dataset Curation and Security</i> 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: Reinforcement 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**