

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 & Rozbeh 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

PhD	Name	Gender	Topic	(Co-) Advisor	Program	Year
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 –

TalkingToRobots.com

Masters

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

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

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

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

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, <u>Yonatan Bisk</u> , Olexandr Isayev <i>Conference on Empirical Methods in Natural Language Processing</i>	
12	Position: You Can't Manufacture a NeRF	2025
	Ani Kimmel, Mueed Ur Rehman, <u>Yonatan Bisk</u> , Gary K. Fedder <i>Forty-second International Conference on Machine Learning Position Paper Track</i>	
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, <u>Yonatan Bisk</u> , Roberto Martín-Martín, Yuke Zhu <i>Conference on Robot Learning</i>	
14	Energy Considerations of Large Language Model Inference and Efficiency Optimizations	2025
	Jared Fernandez, Clara Na, Vashisth Tiwari, <u>Yonatan Bisk</u> , Sasha Luccioni, Emma Strubell <i>The 63rd Annual Meeting of the Association for Computational Linguistics</i>	
15	Re-thinking Temporal Search for Long-Form Video Understanding	2025
	Jinhui Ye, Zihan Wang, Haosen Sun, Keshigeyan Chandrasegaran, Zane Durante, Cristobal Eyzaguirre, <u>Yonatan Bisk</u> , Juan Carlos Niebles, Ehsan Adeli, Li Fei-Fei, Jiajun Wu, Manling Li <i>The IEEE/CVF Conference on Computer Vision and Pattern Recognition</i>	
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, <u>Yonatan Bisk</u> , Yejin Choi, Asli Celikyilmaz <i>The Thirteenth International Conference on Learning Representations</i>	
17	ANAVI: Audio Noise Awareness using Visuals of Indoor environments for NAVigation	2024
	Vidhi Jain, Rishi Veerapaneni, <u>Yonatan Bisk</u> <i>Conference on Robot Learning</i>	
18	Situated Instruction Following	2024
	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>	
19	Gradient Localization Improves Lifelong Pretraining of Language Models	2024
	Jared Fernandez, <u>Yonatan Bisk</u> , Emma Strubell <i>Findings of the Conference on Empirical Methods in Natural Language Processing</i>	
20	How to Train Your Fact Verifier: Knowledge Transfer with Multimodal Open Models	2024
	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>	
21	Tools Fail: Detecting Silent Errors in Faulty Tools	2024
	Jimin Sun, So Yeon Min, Yingshan Chang, <u>Yonatan Bisk</u> <i>Conference on Empirical Methods in Natural Language Processing</i>	
22	Language Models Need Inductive Biases to Count Inductively	2025
	Yingshan Chang, <u>Yonatan Bisk</u> <i>The Thirteenth International Conference on Learning Representations</i>	
23	DiffusionPID: Interpreting Diffusion via Partial Information Decomposition	2024
	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>	
24	VISREAS: Complex Visual Reasoning with Unanswerable Questions	2024
	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>	

25	AgentKit: Flow Engineering with Graphs, not Coding 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
26	Skews in the Phenomenon Space Hinder Generalization in Text-to-Image Generation Yingshan Chang, Yasi Zhang, Zhiyuan Fang, Yingnian Wu, <u>Yonatan Bisk</u> , Feng Gao <i>European Conference on Computer Vision</i>	2024
27	Direct Preference Optimization of Video Large Multimodal Models from Language Model Reward 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
28	Vid2Robot: End-to-end Video-conditioned Policy Learning with Cross-Attention Transformers 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
29	SOTOPIA-π: Interactive Learning of Socially Intelligent Language Agents 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
30	OpenEQA: Embodied Question Answering in the Era of Foundation Models 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
31	SOTOPIA: Interactive Evaluation for Social Intelligence in Language Agents 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
32	Open X-Embodiment: Robotic Learning Datasets and RT-X Models: Open X-Embodiment Collaboration about 300 people... including me and Vidhi <i>IEEE International Conference on Robotics and Automation (ICRA)</i>	2024
33	MOSAIC: Learning Unified Multi-Sensory Object Property Representations for Robot Perception Gyan Tatiya, Jonathan Francis, Ho-Hsiang Wu, <u>Yonatan Bisk</u> , Jivko Sinapov <i>IEEE International Conference on Robotics and Automation</i>	2024
34	WebArena: A Realistic Web Environment for Building Autonomous Agents 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
35	Spatial-Language Attention Policies for Efficient Robot Learning Priyam Parashar, Vidhi Jain, Xiaohan Zhang, Jay Vakil, Sam Powers, <u>Yonatan Bisk</u> , Chris Paxton <i>Conference on Robot Learning</i>	2023
36	SPAE: Semantic Pyramid AutoEncoder for Multimodal Generation with Frozen LLMs 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

37	HomeRobot: Open-Vocabulary Mobile Manipulation 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
38	SPRING: GPT-4 Out-performs RL Algorithms by Studying Papers and Reasoning 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
39	Towards Open-World Mobile Manipulation in Homes: Lessons from the Neurips 2023 HomeRobot Open Vocabulary Mobile Manipulation Challenge 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
40	EXCALIBUR: Encouraging and Evaluating Embodied Exploration 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
41	The Framework Tax: Disparities Between Inference Efficiency in Research and Deployment 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>	2023
42	Computational Language Acquisition with Theory of Mind Andy Liu, Hao Zhu, Emmy Liu, <u>Yonatan Bisk</u> , Graham Neubig <i>The Eleventh International Conference on Learning Representations</i>	2023
43	Self-Supervised Object Goal Navigation with In-Situ Finetuning 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>	2023
44	Don't Copy the Teacher: Data and Model Challenges in Embodied Dialogue So Yeon Min, Hao Zhu, Ruslan Salakhutdinov, <u>Yonatan Bisk</u> <i>Conference on Empirical Methods in Natural Language Processing</i>	2022
45	EvEntS RealM: Event Reasoning of Entity States via Language Models Evangelia Spiliopoulou, Artidoro Pagnoni, <u>Yonatan Bisk</u> , Eduard Hovy <i>Conference on Empirical Methods in Natural Language Processing</i>	2022
46	On Advances in Text Generation from Images Beyond Captioning: A Case Study in Self-Rationalization 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>	2022
47	Transformers are Adaptable Task Planners Vidhi Jain, Yixin Lin, Eric Undersander, <u>Yonatan Bisk</u> , Akshara Rai <i>Conference on Robot Learning</i>	2022
48	Symmetric Machine Theory of Mind Melanie Sclar, Graham Neubig, <u>Yonatan Bisk</u> <i>39th International Conference on Machine Learning</i>	2022
49	A Framework for Learning to Request Rich and Contextually Useful Information from Humans Khanh Nguyen, <u>Yonatan Bisk</u> , Hal Daume III <i>39th International Conference on Machine Learning</i> ,	2022

50	Simulated Language Learning from Communicative Goals and Linguistic Input Hao Zhu, <u>Yonatan Bisk</u> , Graham Neubig <i>Annual Meeting of the Cognitive Science Society (Oral)</i>	2022
51	HEAR 2021: Holistic Evaluation of Audio Representations 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>	2022
52	KAT: A Knowledge Augmented Transformer for Vision-and-Language 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>	2022
53	FILM: Following Instructions in Language with Modular Methods So Yeon Min, Devendra Singh Chaplot, Pradeep Ravikumar, <u>Yonatan Bisk</u> , Ruslan Salakhutdinov <i>The Tenth International Conference on Learning Representations</i>	2022
54	WebQA: Multihop and Multimodal QA Yingshan Chang, Mridu Narang, Hisami Suzuki, Guihong Cao, Jianfeng Gao, <u>Yonatan Bisk</u> <i>Conference on Computer Vision and Pattern Recognition (Oral)</i>	2022
55	Dependency Induction Through the Lens of Visual Perception Ruiqi 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>	2021
56	Language Grounding with 3D Objects Jesse Thomason, Mohit Shridhar, <u>Yonatan Bisk</u> , Chris Paxton, Luke Zettlemoyer <i>Conference on Robot Learning</i>	2021
57	TACo: Token-aware Cascade Contrastive Learning for Video-Text Alignment Jianwei Yang, <u>Yonatan Bisk</u> , Jianfeng Gao <i>International Conference on Computer Vision</i>	2021
58	Few-shot Language Coordination by Modeling Theory of Mind Hao Zhu, Graham Neubig, <u>Yonatan Bisk</u> <i>The Thirty-eighth International Conference on Machine Learning</i>	2021
59	Grounding ‘Grounding’ in NLP Khyathi Raghavi Chandu, <u>Yonatan Bisk</u> , Alan W Black <i>Findings of The 2021 Conference of the Association for Computational Linguistics</i>	2021
60	An Empirical Study on the Generalization Power of Neural Representations Learned via Visual Guessing Games Alessandro Suglia, <u>Yonatan Bisk</u> , 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
61	Knowledge-driven Data Construction for Zero-shot Evaluation in Commonsense Question Answering Kaixin Ma, Filip Ilievski, Jonathan Francis, <u>Yonatan Bisk</u> , Eric Nyberg, Alessandro Oltramari <i>35th AAAI Conference on Artificial Intelligence</i>	2021
62	ALFWorld: Aligning Text and Embodied Environments for Interactive Learning Mohit Shridhar, Xingdi Yuan, Marc-Alexandre Côté, <u>Yonatan Bisk</u> , Adam Trischler, Matthew Hausknecht <i>International Conference on Learning Representations</i>	2021
63	Imagining Grounded Conceptual Representations from Perceptual Information in Situated Guessing Games Alessandro Suglia, Antonio Vergari, Ioannis Konstas, <u>Yonatan Bisk</u> , Emanuele Bastianelli, Andrea Vanzo, Oliver Lemon <i>The 28th International Conference on Computational Linguistics (Oral)</i>	2020

64	Experience Grounds Language 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
65	RMM: A Recursive Mental Model for Dialog Navigation Homero Roman Roman, Yonatan Bisk, Jesse Thomason, Asli Celikyilmaz, Jianfeng Gao <i>Conference on Empirical Methods in Natural Language Processing: Findings</i>	2020
66	ALFRED: A Benchmark for Interpreting Grounded Instructions for Everyday Tasks 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
67	PIQA: Reasoning about Physical Commonsense in Natural Language Yonatan Bisk, Rowan Zellers, Ronan Le Bras, Jianfeng Gao, Yejin Choi <i>Thirty-Fourth AAAI Conference on Artificial Intelligence (Oral)</i>	2020
68	Robust Navigation with Language Pretraining and Stochastic Sampling Xiujun 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
69	Defending Against Neural Fake News 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
70	Improving Robot Success Detection using Static Object Data Rosario Scalise, Jesse Thomason, Yonatan Bisk, Siddhartha Srinivasa <i>IEEE/RSJ International Conference on Intelligent Robots and Systems</i>	2019
71	Early Fusion for Goal Directed Robotic Vision Aaron Walsman, Yonatan Bisk, 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
72	HellaSwag: Can a Machine Really Finish Your Sentence? Rowan Zellers, Ari Holtzman, Yonatan Bisk, Ali Farhadi, Yejin Choi <i>Association for Computational Linguistics</i>	2019
73	From Recognition to Cognition: Visual Commonsense Reasoning Rowan Zellers, Yonatan Bisk, Ali Farhadi, Yejin Choi <i>The IEEE Conference on Computer Vision and Pattern Recognition (Oral)</i>	2019
74	Tactical Rewind: Self-Correction via Backtracking in Vision-and-Language Navigation Liyiming Ke, Xiujun Li, Yonatan Bisk, 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
75	Prospection: Interpretable Plans From Language By Predicting the Future Chris Paxton, Yonatan Bisk, Jesse Thomason, Arunkumar Byravan, Dieter Fox <i>International Conference on Robotics and Automation (ICRA)</i>	2019
76	Shifting the Baseline: Single Modality Performance on Visual Navigation & QA Jesse Thomason, Daniel Gordon, Yonatan Bisk <i>Annual Conference of the North American Chapter of the Association for Computational Linguistics</i>	2019
77	Benchmarking Hierarchical Script Knowledge Yonatan Bisk, Jan Buys, Karl Pichotta, Yejin Choi <i>Annual Conference of the North American Chapter of the Association for Computational Linguistics (Oral)</i>	2019

78	Character-based Surprisal as a Model of Reading Difficulty in the Presence of Errors Michael Hahn, Frank Keller, <u>Yonatan Bisk</u> , Yonatan Belinkov <i>The 41st Annual Meeting of the Cognitive Science Society (Oral)</i>	2019
79	SWAG: A Large-Scale Adversarial Dataset for Grounded Commonsense Inference Rowan Zellers, <u>Yonatan Bisk</u> , Roy Schwartz, Yejin Choi <i>Conference on Empirical Methods in Natural Language Processing (Oral)</i>	2018
80	Synthetic and Natural Noise Both Break Neural Machine Translation Yonatan Belinkov, <u>Yonatan Bisk</u> <i>6th International Conference on Learning Representations (Oral)</i>	2018
81	Learning Interpretable Spatial Operations in a Rich 3D Blocks World <u>Yonatan Bisk</u> , Kevin Shih, Yejin Choi, Daniel Marcu <i>Thirty-Second Conference on Artificial Intelligence (AAAI-18)</i>	2018
82	Natural Language Inference from Multiple Premises Alice Lai, <u>Yonatan Bisk</u> , Julia Hockenmaier <i>Eighth International Joint Conference on Natural Language Processing (Oral)</i>	2017
83	Natural Language Communication with Robots <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
84	Supertagging with LSTMs 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
85	Evaluating Induced CCG Parsers on Grounded Semantic Parsing <u>Yonatan Bisk</u> , Siva Reddy, John Blitzer, Julia Hockenmaier, Mark Steedman <i>2016 Conference on Empirical Methods in Natural Language Processing</i>	2016
86	Probing the Linguistic Strengths and Limitations of Unsupervised Grammar Induction <u>Yonatan Bisk</u> , Julia Hockenmaier <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
87	Labeled Grammar Induction with Minimal Supervision <u>Yonatan Bisk</u> , Christos Christodoulopoulos, Julia Hockenmaier <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
88	Simple Robust Grammar Induction with Combinatory Categorial Grammar <u>Yonatan Bisk</u> , Julia Hockenmaier <i>Twenty-Sixth Conference on Artificial Intelligence (AAAI-12)</i>	2012
89	Document-Topic Hierarchies from Document Graphs Tim Weninger, <u>Yonatan Bisk</u> , Jiawei Han <i>21st ACM international conference on Information and knowledge management (CIKM 2012)</i>	2012
90	Normal-form parsing for CCGs with generalized composition and type-raising Julia Hockenmaier, <u>Yonatan Bisk</u> <i>23rd International Conference on Computational Linguistics (Coling 2010)</i>	2010

Workshop Publications

91	MAEA: Multimodal Attribution for Embodied AI Vidhi Jain, Jayant Sravan Tamarapalli, Sahiti Yerramilli, <u>Yonatan Bisk</u> <i>Progress and Challenges in Building Trustworthy Embodied AI at NeurIPS 2022</i>	2022
92	Tackling AlfWorld with Action Attention and Common Sense from Language Models Yue Wu, So Yeon Min, <u>Yonatan Bisk</u> , Ruslan Salakhutdinov, Shrimai Prabhumoye <i>Language and Reinforcement Learning Workshop at NeurIPS 2022</i>	2022

93	Worst of Both Worlds: Biases Compound in Pre-trained Vision-and-Language Models Tejas Srinivasan, <u>Yonatan Bisk</u> <i>4th Workshop on Gender Bias in Natural Language Processing</i>	2022
94	KB-VLP: Knowledge Based Vision and Language Pretraining Kezhen Chen, Qiuyuan Huang, <u>Yonatan Bisk</u> , Daniel McDuff, Jianfeng Gao <i>ICML21 Workshop on Self-Supervised Learning</i>	2021
95	A Benchmark for Structured Procedural Knowledge Extraction from Cooking Videos Frank F. Xu, Lei Ji, Botian Shi, Junyi Du, Graham Neubig, <u>Yonatan Bisk</u> , Nan Duan <i>Workshop on NLP Beyond Text</i>	2020
96	Inducing Grammars with and for Neural Machine Translation Ke Tran, <u>Yonatan Bisk</u> <i>2nd Workshop on Neural Machine Translation (Best Paper)</i>	2018
97	Bridging HMMs and RNNs through Architectural Transformations Jan Buys, <u>Yonatan Bisk</u> , Yejin Choi <i>32nd Conference on Neural Information Processing Systems (NIPS 2018), IRASL workshop</i>	2018
98	Towards a Dataset for Human Computer Communication via Grounded Language Acquisition <u>Yonatan Bisk</u> , Daniel Marcu, William Wong <i>AAAI 2016 Workshop on Symbiotic Cognitive Systems</i>	2016
99	Unsupervised Neural Hidden Markov Models Ke Tran, <u>Yonatan Bisk</u> , Ashish Vaswani, Daniel Marcu, Kevin Knight <i>Workshop on Structured Prediction for NLP (Oral)</i>	2016
100	Induction of Linguistic Structure with Combinatory Categorial Grammars <u>Yonatan Bisk</u> , Julia Hockenmaier <i>NAACL HLT Workshop on Induction of Linguistic Structure</i>	2012

Preprint Publications

101	Looking beyond the next token Abita Thankaraj, Yiding Jiang, J. Zico Kolter, <u>Yonatan Bisk</u> <i>ArXiv</i>	2025
102	Model Successor Functions Yingshan Chang, <u>Yonatan Bisk</u> <i>ArXiv</i>	2025
103	Self-Regulation and Requesting Interventions So Yeon Min, Yue Wu, Jimin Sun, Max Kaufmann, Fahim Tajwar, <u>Yonatan Bisk</u> , Ruslan Salakhutdinov <i>ArXiv</i>	2025
104	Embodied-RAG: General non-parametric Embodied Memory for Retrieval and Generation Quanting Xie, So Yeon Min, Tianyi Zhang, Aarav Bajaj, Ruslan Salakhutdinov, Matthew Johnson-Roberson, <u>Yonatan Bisk</u> <i>ArXiv</i>	2024
105	DegustaBot: Zero-Shot Visual Preference Estimation for Personalized Multi-Object Rearrangement Benjamin A. Newman, Pranay Gupta, Kris Kitani, <u>Yonatan Bisk</u> , Henny Admoni, Chris Paxton <i>ArXiv</i>	2024
106	Dialogue with Robots: Proposals for Broadening Participation and Research in the SLIVAR Community 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

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, <u>Yonatan Bisk</u>	
	<i>ArXiv</i>	
108	Reasoning about the Unseen for Efficient Outdoor Object Navigation	2023
	Quanting Xie, Tianyi Zhang, Kedi Xu, Matthew Johnson-Roberson, <u>Yonatan Bisk</u>	
	<i>ArXiv</i>	
109	Plan, Eliminate, and Track – Language Models are Good Teachers for Embodied Agents	2023
	Yue Wu, So Yeon Min, <u>Yonatan Bisk</u> , Ruslan Salakhutdinov, Amos Azaria, Yuanzhi Li, Tom Mitchell, Shrimai Prabhumoye	
	<i>ArXiv</i>	
110	Retrospectives on the Embodied AI Workshop	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>	
111	Multi-View Learning for Vision-and-Language Navigation	2020
	Qiaolin Xia, Xiujun Li, Chunyuan Li, <u>Yonatan Bisk</u> , Zhifang Sui, Jianfeng Gao, Yejin Choi, Noah A. Smith	
	<i>ArXiv</i>	
112	FIND: Identifying Functionally and Structurally Important Features in Protein Sequences with Deep Neural Networks	2019
	Ranjani Murali, James Hemp, Victoria Orphan, <u>Yonatan Bisk</u>	
	<i>bioRxiv</i>	
113	Balancing Shared Autonomy with Human-Robot Communication	2018
	Rosario Scalise, <u>Yonatan Bisk</u> , Maxwell Forbes, Daqing Yi, Yejin Choi, Siddhartha Srinivasa	
	<i>ArXiv</i>	
114	CHALET: Cornell House Agent Learning Environment	2018
	Claudia Yan, Dipendra Misra, Andrew Bennett, Aaron Walsman, <u>Yonatan Bisk</u> , Yoav Artzi	
	<i>ArXiv Preprint 1801.07357</i>	

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

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

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

-	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 (AAACL)	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

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

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: 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