

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 & 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 Categorical 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](https://talkingtorobots.com)

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

Masters

MSR	Jacob Thompson	he/him	<i>Generalist Agents</i>	RI	2024
MSR	Yash Jangir	he/him	<i>Robust Policies</i>	RI	2024
5th	Claire Jin	she/her	<i>Embodied Dialogue</i>		2024

Alumni

PhD

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

MS

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

Interns and Undergraduates

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

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 **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, Subhojit 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 Categorical 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 **ANAVI: Audio Noise Awareness using Visuals of Indoor environments for NAVigation** 2024
Vidhi Jain, Rishi Veerapaneni, [Yonatan Bisk](#)
Conference on Robot Learning
- 14 **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
- 15 **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
- 16 **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
- 17 **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
- 18 **Language Models Need Inductive Biases to Count Inductively** 2025
Yingshan Chang, [Yonatan Bisk](#)
The Thirteenth International Conference on Learning Representations
- 19 **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
- 20 **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
- 21 **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
- 22 **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
- 23 **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
- 24 **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

- 25 **SOTOPIA- π : 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
- 26 **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 Mccvay, 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
- 27 **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)

- 28 **Open X-Embodiment: Robotic Learning Datasets and RT-X Models: Open X-Embodiment Collaboration** 2024
 Abby O'Neill, Abdul Rehman, Abhiram Maddukuri, Abhishek Gupta, Abhishek Padalkar, Abraham Lee, Acorn Pooley, Agrim Gupta, Ajay Mandlekar, Ajinkya Jain, Albert Tung, Alex Bewley, Alex Herzog, Alex Irpan, Alexander Khazatsky, Anant Rai, Anchit Gupta, Andrew Wang, Anikait Singh, Animesh Garg, Aniruddha Kembhavi, Annie Xie, Anthony Brohan, Antonin Raffin, Archit Sharma, Arefeh Yavary, Arhan Jain, Ashwin Balakrishna, Ayzaan Wahid, Ben Burgess-Limerick, Beomjoon Kim, Bernhard Schölkopf, Blake Wulfe, Brian Ichter, Cewu Lu, Charles Xu, Charlotte Le, Chelsea Finn, Chen Wang, Chenfeng Xu, Cheng Chi, Chenguang Huang, Christine Chan, Christopher Agia, Chuer Pan, Chuyuan Fu, Coline Devin, Danfei Xu, Daniel Morton, Danny Driess, Daphne Chen, Deepak Pathak, Dhruv Shah, Dieter Buehler, Dinesh Jayaraman, Dmitry Kalashnikov, Dorsa Sadigh, Edward Johns, Ethan Foster, Fangchen Liu, Federico Ceola, Fei Xia, Feiyu Zhao, Freek Stulp, Gaoyue Zhou, Gaurav S. Sukhatme, Gautam Salhotra, Ge Yan, Gilbert Feng, Giulio Schiavi, Glen Berseth, Gregory Kahn, Guanzhi Wang, Hao Su, Hao-Shu Fang, Haochen Shi, Henghui Bao, Heni Ben Amor, Henrik I Christensen, Hiroki Furuta, Homer Walke, Hongjie Fang, Huy Ha, Igor Mordatch, Ilija Radosavovic, Isabel Leal, Jacky Liang, Jad Abou-Chakra, Jaehyung Kim, Jaimyn Drake, Jan Peters, Jan Schneider, Jasmine Hsu, Jeannette Bohg, Jeffrey Bingham, Jeffrey Wu, Jensen Gao, Jiaheng Hu, Jiajun Wu, Jialin Wu, Jiankai Sun, Jianlan Luo, Jiayuan Gu, Jie Tan, Jihoon Oh, Jimmy Wu, Jingpei Lu, Jingyun Yang, Jitendra Malik, João Silvério, Joey Hejna, Jonathan Booyer, Jonathan Tompson, Jonathan Yang, Jordi Salvador, Joseph J. Lim, Junhyek Han, Kaiyuan Wang, Kanishka Rao, Karl Pertsch, Karol Hausman, Keegan Go, Keerthana Gopalakrishnan, Ken Goldberg, Kendra Byrne, Kenneth Oslund, Kento Kawaharazuka, Kevin Black, Kevin Lin, Kevin Zhang, Kiana Ehsani, Kiran Lekkala, Kirsty Ellis, Krishan Rana, Krishnan Srinivasan, Kuan Fang, Kunal Pratap Singh, Kuo-Hao Zeng, Kyle Hatch, Kyle Hsu, Laurent Itti, Lawrence Yunliang Chen, Lerrel Pinto, Li Fei-Fei, Liam Tan, Linxi Jim Fan, Lionel Ott, Lisa Lee, Luca Weihs, Magnum Chen, Marion Lepert, Marius Memmel, Masayoshi Tomizuka, Masha Itkina, Mateo Guaman Castro, Max Spero, Maximilian Du, Michael Ahn, Michael C. Yip, Mingtong Zhang, Mingyu Ding, Minho Heo, Mohan Kumar Srirama, Mohit Sharma, Moo Jin Kim, Naoaki Kanazawa, Nicklas Hansen, Nicolas Heess, Nikhil J Joshi, Niko Suenderhauf, Ning Liu, Norman Di Palo, Nur Muhammad MahiShafiullah, Oier Mees, Oliver Kroemer, Osbert Bastani, Pannag R Sanketi, Patrick Tree Miller, Patrick Yin, Paul Wohlhart, Peng Xu, Peter David Fagan, Peter Mitrano, Pierre Sermanet, Pieter Abbeel, Priya Sundaresan, Qiuyu Chen, Quan Vuong, Rafael Rafailov, Ran Tian, Ria Doshi, Roberto Martín-Martín, Rohan Bajjal, Rosario Scalise, Rose Hendrix, Roy Lin, Runjia Qian, Ruohan Zhang, Russell Mendonca, Rutav Shah, Ryan Hoque, Ryan Julian, Samuel Bustamante, Sean Kirmani, Sergey Levine, Shan Lin, Sherry Moore, Shikhar Bahl, Shivin Dass, Shubham Sonawani, Shuran Song, Sichun Xu, Siddhant Halder, Siddharth Karamcheti, Simeon Adebola, Simon Guist, Soroush Nasiriany, Stefan Schaal, Stefan Welker, Stephen Tian, Subramanian Ramamoorthy, Sudeep Dasari, Suneel Belkhale, Sungjae Park, Suraj Nair, Suvir Mirchandani, Takayuki Osa, Tanmay Gupta, Tatsuya Harada, Tatsuya Matsushima, Ted Xiao, Thomas Kollar, Tianhe Yu, Tianli Ding, Todor Davchev, Tony Z. Zhao, Travis Armstrong, Trevor Darrell, Trinity Chung, Vidhi Jain, Vincent Vanhoucke, Wei Zhan, Wenxuan Zhou, Wolfram Burgard, Xi Chen, Xiaolong Wang, Xinghao Zhu, Xinyang Geng, Xiyuan Liu, Xu Liangwei, Xuanlin Li, Yao Lu, Yecheng Jason Ma, Yejin Kim, Yevgen Chebotar, Yifan Zhou, Yifeng Zhu, Yilin Wu, Ying Xu, Yixuan Wang, Yonatan Bisk, Yoonyoung Cho, Youngwoon Lee, Yuchen Cui, Yue Cao, Yueh-Hua Wu, Yujin Tang, Yuke Zhu, Yunchu Zhang, Yunfan Jiang, Yunshuang Li, Yunzhu Li, Yusuke Iwasawa, Yutaka Matsuo, Zehan Ma, Zhuo Xu, Zichen Jeff Cui, Zichen Zhang, Zipeng Lin
IEEE International Conference on Robotics and Automation (ICRA)
- 29 **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
- 30 **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
- 31 **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

- 32 **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
- 33 **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
- 34 **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
- 35 **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
- 36 **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
- 37 **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)
- 38 **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
- 39 **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
- 40 **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
- 41 **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
- 42 **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
- 43 **Transformers are Adaptable Task Planners** 2022
Vidhi Jain, Yixin Lin, Eric Undersander, [Yonatan Bisk](#), Akshara Rai
Conference on Robot Learning

- 44 **Symmetric Machine Theory of Mind** 2022
Melanie Sclar, Graham Neubig, [Yonatan Bisk](#)
39th International Conference on Machine Learning
- 45 **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,
- 46 **Simulated Language Learning from Communicative Goals and Linguistic Input** 2022
Hao Zhu, [Yonatan Bisk](#), Graham Neubig
Annual Meeting of the Cognitive Science Society (Oral)
- 47 **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
- 48 **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)
- 49 **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
- 50 **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)
- 51 **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
- 52 **Language Grounding with 3D Objects** 2021
Jesse Thomason, Mohit Shridhar, [Yonatan Bisk](#), Chris Paxton, Luke Zettlemoyer
Conference on Robot Learning
- 53 **TACo: Token-aware Cascade Contrastive Learning for Video-Text Alignment** 2021
Jianwei Yang, [Yonatan Bisk](#), Jianfeng Gao
International Conference on Computer Vision
- 54 **Few-shot Language Coordination by Modeling Theory of Mind** 2021
Hao Zhu, Graham Neubig, [Yonatan Bisk](#)
The Thirty-eighth International Conference on Machine Learning
- 55 **Grounding ‘Grounding’ in NLP** 2021
Khyathi Raghavi Chandu, [Yonatan Bisk](#), Alan W Black
Findings of The 2021 Conference of the Association for Computational Linguistics
- 56 **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)
- 57 **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
- 58 **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

- 59 **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)
- 60 **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)
- 61 **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
- 62 **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)
- 63 **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)
- 64 **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
- 65 **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
- 66 **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
- 67 **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
- 68 **HellaSwag: Can a Machine Really Finish Your Sentence?** 2019
Rowan Zellers, Ari Holtzman, [Yonatan Bisk](#), Ali Farhadi, Yejin Choi
Association for Computational Linguistics
- 69 **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)
- 70 **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)
- 71 **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)
- 72 **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

- 73 **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)
- 74 **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)
- 75 **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)
- 76 **Synthetic and Natural Noise Both Break Neural Machine Translation** 2018
 Yonatan Belinkov, Yonatan Bisk
6th International Conference on Learning Representations (Oral)
- 77 **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)
- 78 **Natural Language Inference from Multiple Premises** 2017
 Alice Lai, Yonatan Bisk, Julia Hockenmaier
Eighth International Joint Conference on Natural Language Processing (Oral)
- 79 **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)
- 80 **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)
- 81 **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
- 82 **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)
- 83 **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)
- 84 **Simple Robust Grammar Induction with Combinatory Categorical Grammar** 2012
 Yonatan Bisk, Julia Hockenmaier
Twenty-Sixth Conference on Artificial Intelligence (AAAI-12)
- 85 **Document-Topic Hierarchies from Document Graphs** 2012
 Tim Wenginger, Yonatan Bisk, Jiawei Han
21st ACM international conference on Information and knowledge management (CIKM 2012)
- 86 **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

- 87 **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

- 88 **Tackling AlfWorld with Action Attention and Common Sense from Language Models** 2022
Yue Wu, So Yeon Min, [Yonatan Bisk](#), Ruslan Salakhutdinov, Shrimai Prabhunoye
Language and Reinforcement Learning Workshop at NeurIPS 2022
- 89 **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
- 90 **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
- 91 **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
- 92 **Inducing Grammars with and for Neural Machine Translation** 2018
Ke Tran, [Yonatan Bisk](#)
2nd Workshop on Neural Machine Translation (Best Paper)
- 93 **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
- 94 **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
- 95 **Unsupervised Neural Hidden Markov Models** 2016
Ke Tran, [Yonatan Bisk](#), Ashish Vaswani, Daniel Marcu, Kevin Knight
Workshop on Structured Prediction for NLP (Oral)
- 96 **Induction of Linguistic Structure with Combinatory Categorical Grammars** 2012
[Yonatan Bisk](#), Julia Hockenmaier
NAACL HLT Workshop on Induction of Linguistic Structure

Preprint Publications

- 97 **Looking beyond the next token** 2025
Abitha Thankaraj, Yiding Jiang, J. Zico Kolter, [Yonatan Bisk](#)
ArXiv
- 98 **Model Successor Functions** 2025
Yingshan Chang, [Yonatan Bisk](#)
ArXiv
- 99 **Self-Regulation and Requesting Interventions** 2025
So Yeon Min, Yue Wu, Jimin Sun, Max Kaufmann, Fahim Tajwar, [Yonatan Bisk](#), Ruslan Salakhutdinov
ArXiv
- 100 **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
- 101 **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

- 102 **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
- 103 **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
- 104 **Reasoning about the Unseen for Efficient Outdoor Object Navigation** 2023
Quanting Xie, Tianyi Zhang, Kedi Xu, Matthew Johnson-Roberson, [Yonatan Bisk](#)
ArXiv
- 105 **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
- 106 **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
- 107 **Multi-View Learning for Vision-and-Language Navigation** 2020
Qiaolin Xia, Xiujuan Li, Chunyuan Li, [Yonatan Bisk](#), Zhifang Sui, Jianfeng Gao, Yejin Choi, Noah A. Smith
ArXiv
- 108 **FIND: Identifying Functionally and Structurally Important Features in Protein Sequences with Deep Neural Networks** 2019
Ranjani Murali, James Hemp, Victoria Orphan, [Yonatan Bisk](#)
bioRxiv
- 109 **Balancing Shared Autonomy with Human-Robot Communication** 2018
Rosario Scalise, [Yonatan Bisk](#), Maxwell Forbes, Daqing Yi, Yejin Choi, Siddhartha Srinivasa
ArXiv
- 110 **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 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 <i>Nikolaos Gkanatsios</i>	Katerina Fragkiadaki, CMU
2024	PhD <i>Xiaoyu Zhu</i>	Alex Hauptmann, CMU
2024	PhD <i>Yijun Qian</i>	Alex Hauptmann, CMU
2024	PhD <i>Jielin Qiu</i>	Lei Li & Christos Faloutsos, CMU
2024	PhD <i>Nikita Srivatsan</i>	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>Volkan 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	11-777 MultiModal Machine Learning	# Students: 145 , SP
2024	11-851 Talking to Robots	# Students: 37 , FA
	– 11-777 MultiModal Machine Learning <i>w/Daniel Fried</i>	# 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 <i>w/Emma Strubell</i>	# Students: 69 , FA
	– 11-777 MultiModal Machine Learning <i>w/Daniel Fried</i>	# Students: 107 , SP
2022	11-767 On-Device Machine Learning <i>w/Emma Strubell</i>	# Students: 42 , FA
	– 11-777 MultiModal Machine Learning	# Students: 94 , SP
2021	11-767 On-Device Machine Learning (co-created) <i>w/Emma Strubell</i>	# Students: 31 , FA
	– 11-777 MultiModal Machine Learning	# Students: 42 , SP

(Senior) Area Chair / Action Editor

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

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

AI/ML	IROS	IEEE/RSJ International Conference on Intelligent Robots and Systems	2019,23–24
	RA-L	IEEE Robotics and Automation Letters	2019,2023
	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
CV	T-PAMI	Transactions on Pattern Analysis and Machine Intelligence	2023 –
	CVPR	Computer Vision and Pattern Recognition	2020, 2023
	ICCV	International Conference on Computer Vision	2025

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 **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*