Yonatan Bisk

Assistant Professor of Computer Science

 $GHC~6703 \\ \boxtimes ybisk@cs.cmu.edu \\ he/him$

	Positions	
2020 –	Assistant Professor Carnegie Mellon University Language Technologies Institute Robotics Institute (courtesy)	
2022 –	Visiting Professor Meta Fundamental Al Research (FAIR)	w/ Dhruv Batra
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				TalkingT	oRobo	ts.com
PhD	Hao Zhu	he/him	Theory of Mind		(co-G Neubig)	LTI	2019 –
PhD	Jared Fernandez	he/him	Efficiency		(co-E Strubell)	LTI	2020 -
PhD	Vidhi Jain	she/her	Language to Control			RI	2021 –
PhD	Tiffany Min	she/her	Embodiment		(co-R Salakhutdinov)	MLD	2021 –
PhD	Yingshan Chang	she/her	Multimodal Reasoning	g		LTI	2022 –
PhD	Abitha Thankaraj	she/her	Language to Control		(co-A Kumar)	RI	2024 –
PhD	Jimin Sun	she/her	Tools			LTI	2024 –
PhD	Rosa Vitiello	she/her	Collaboration		(co-C Rose)	LTI	2024 –
PhD	Quanting Xie	he/him	LLMs for Robotics			RI	2024 –
	Alumni, Interns,	and	Undergraduates				
Ugrad	Claire Jin	she/her	Embodied Dialogue				2024
Ugrad	Maria Yampolsky	she/her	Audio				2024
Intern	Minyoung Hwang	she/her	Preference Learning				2024
MS	Quanting Xie	he/him	LLMs for Robotics			Med	hE 2023
MSAII	Seed emergence Harini Subramanyan Karthik Natarajan		Juanyun Mai Noel D Souza	-	a Morbale Zhang		2024
	,				S		

MRSD	Assistive Robotics for Elder	care (*co-7 Frick	rson)				2023
WINSD	Abhinav Gupta	he/him	Atharva Pu	salkar		he/him	2023
	Praveen Venkatesh	he/him	Shaolin Kat			he/him	
	Shivam Tripathy	he/him				,	
MLT		Embodied Dialogi	ue		LTI	2022 -	- 2023
Ugrad	Xiang Fan	Transformer Effici		co-E Strubell)			2022
Intern	Andy Liu	Theory-of-Mind	,	co-G Neubig)			2022
	•	•	(,	co d recubig)			2022
Intern		Grounding					
MRSD	Modular Teleop with Autor	• (,				2022
	Jashkumar Diyora	he/him	Shruti Gang Prakhar Pra			she/her	
	Jigar Patel Shivani Sivakumar	he/him	Praknar Pra	adeep		he/him	
MCDS	Embodied Navigation and I	she/her					2022
MCD3	Adhokshaja Madhwaraj	he/him	Kushagra N	Mahajan		he/him	2022
	Sai Vishwas Padigi	he/him	Vineeth Red	•		he/him	
	Malaika Vijay	she/her	Zheng (Jess	•		she/her	
MCDS	Embodied Dialogue and To	,	Zitelig (Jess	sica) Zilolig		sne/nei	2022
WCDS	Xinyue Chen	she/her	Nikhil Gupt	·a		he/him	2022
	Benny Jiang	he/him	Shubham P			he/him	
	Prasoon Varshney	he/him	Onabham 1			ne, mm	
MCDS	Novel Concept Learning	ne, mm					2022
020	Bharani Ujjaini Kempaiah	she/her	Linyi Li			she/her	
MSAII	Visual Patent Search	/	,			/	2022
WISAII	Suchong Dong	she/her	Zhiyuan Gu	IO		he/him	2022
	Mansi Goyal	she/her	Marta Men			she/her	
	Sreenidhi Sundaram	she/her	Leon Van D			he/him	
MLT		Multimodal Reaso			LTI		- 2022
MLT		Embodied Visual	_		LTI		- 2022
	,		-	() (/:)			
MS	Xiaoyu (Erin) Zhang she/her		`	co-O Kroemer)	5th	2021 -	- 2022
Ugrad	Feiyu (Gavin) Zhu	Video Summariza	,	co-C Paxton)			2021
Intern	Melanie Sclar	Symmetric Theory	y-of-Mind (d	co-G Neubig)			2021
Intern	Blessing Bassey	<i>TextVQA</i>					2021
	1.5.11						
	Journal Publications						
1	Training Vision-Language T	ransformers from	Captions				2023
	Liangke Gui, Yingshan Chang, G	iuyuan Huang, Subh	nojit Som, Alex	xander Hauptmanr	n, Jiar	nfeng	
	Gao, <u>Yonatan Bisk</u>						
	Transactions on Machine Learnin	ng Research					
2	The Return of Lexical Depe	endencies: Neura	Lexicalized	PCFGs			2020
	Hao Zhu, <u>Yonatan Bisk</u> , Graham	Neubig					
	Transactions of the Association	for Computational L	inguistics				
3	An HDP Model for Inducin	g Combinatory C	ategorial Gr	ammars			2013
	Yonatan Bisk, Julia Hockenmaie	•					
	Transactions of the Association	for Computational L	inguistics				
	Conference Publication	ons					
4							2024
4	So Yeon Min, Xavi Puig, Devend		Sung-Van Van	σ Akshara Rai Dr	rivam		2024
	Parashar, Ruslan Salakhutdinov,		-	-	iyaiii		
	European Conference on Compu		oottugiii				
E			lnaneworahl.	o Questions			2024
5	VISREAS: Complex Visual Syeda Nahida Akter, Sangwu Le						2024
	Findings of the 62nd Annual Me				CS		

6	AgentKit: Flow Engineering with Graphs, not Coding Yue Wu, Yewen Fan, So Yeon Min, Shrimai Prabhumoye, Stephen McAleer, Yonatan Bisk, Ruslan Salakhutdinov, Yuanzhi Li, Tom Mitchell Conference on Language Modeling	2024
7	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	
8	Vid2Robot: End-to-end Video-conditioned Policy Learning with Cross-Attention	2024
	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	
	Robotics: Science and Systems	
9	SOTOPIA-π: Interactive Learning of Socially Intelligent Language Agents Ruiyi Wang, Haofei Yu, Wenxin Zhang, Zhengyang Qi, Maarten Sap, Graham Neubig, Yonatan Bisk, Hao Zhu	2024
	The 62nd Annual Meeting of the Association for Computational Linguistics	
10	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, Yonatan Bisk, Dhruv Batra, Mrinal Kalakrishnan, Franziska Meier, Chris Paxton, Sasha Sax, Aravind Rajeswaran	2024
	Conference on Computer Vision and Pattern Recognition	
11	SOTOPIA: Interactive Evaluation for Social Intelligence in Language Agents 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)	2024

2024

2024

12 Open X-Embodiment: Robotic Learning Datasets and RT-X Models: Open X-Embodiment Collaboration

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 Büchler, 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 Booher, 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 Baijal, 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 Haldar, 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)

13 MOSAIC: Learning Unified Multi-Sensory Object Property Representations for Robot Perception

Gyan Tatiya, Jonathan Francis, Ho-Hsiang Wu, <u>Yonatan Bisk</u>, Jivko Sinapov *IEEE International Conference on Robotics and Automation*

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, Yonatan Bisk, Daniel Fried, Uri Alon, Graham Neubig The Twelfth International Conference on Learning Representations

15 **Spatial-Language Attention Policies for Efficient Robot Learning**Priyam Parashar, Vidhi Jain, Xiaohan Zhang, Jay Vakil, Sam Powers, <u>Yonatan Bisk</u>, Chris Paxton

Conference on Robot Learning

16	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, <u>Yonatan Bisk</u> , Ming-Hsuan Yang, Kevin Murphy, Alexander Hauptmann, Lu Jiang	
	Thirty-seventh Conference on Neural Information Processing Systems	
17	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, Yonatan Bisk, Chris Paxton Conference on Robot Learning	2023
18	SPRING: GPT-4 Out-performs RL Algorithms by Studying Papers and Reasoning	2023
	Yue Wu, Shrimai Prabhumoye, So Yeon Min, <u>Yonatan Bisk</u> , Ruslan Salakhutdinov, Amos Azaria, Tom Mitchell, Yuanzhi Li	
	Thirty-seventh Conference on Neural Information Processing Systems	
19	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, Yonatan Bisk, Chris Paxton	2023
	Thirty-seventh Conference on Neural Information Processing Systems: Competition Track	
20	EXCALIBUR: Encouraging and Evaluating Embodied Exploration 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	2023
21		2023
21	The Framework Tax: Disparities Between Inference Efficiency in Research and Deployment Jared Fernandez, Jacob Kahn, Clara Na, Yonatan Bisk, Emma Strubell The 2023 Conference on Empirical Methods in Natural Language Processing (Oral)	2023
22	Computational Language Acquisition with Theory of Mind Andy Liu, Hao Zhu, Emmy Liu, Yonatan Bisk, Graham Neubig The Eleventh International Conference on Learning Representations	2023
23	Self-Supervised Object Goal Navigation with In-Situ Finetuning 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	2023
24	Don't Copy the Teacher: Data and Model Challenges in Embodied Dialogue So Yeon Min, Hao Zhu, Ruslan Salakhutdinov, Yonatan Bisk	2022
	Conference on Empirical Methods in Natural Language Processing	
25	EvEntS ReaLM: Event Reasoning of Entity States via Language Models Evangelia Spiliopoulou, Artidoro Pagnoni, <u>Yonatan Bisk</u> , Eduard Hovy Conference on Empirical Methods in Natural Language Processing	2022
26	On Advances in Text Generation from Images Beyond Captioning: A Case Study in Self-Rationalization Shruti Palaskar, Akshita Bhagia, Yonatan Bisk, Florian Metze, Alan W Black, Ana Marasovic Findings of the Conference on Empirical Methods in Natural Language Processing	2022
0-	Findings of the Conference on Empirical Methods in Natural Language Processing	0000
27	Transformers are Adaptable Task Planners Vidhi Jain, Yixin Lin, Eric Undersander, Yonatan Bisk, Akshara Rai Conference on Robot Learning	2022

28	Symmetric Machine Theory of Mind Melanie Sclar, Graham Neubig, Yonatan Bisk 39th International Conference on Machine Learning	2022
29	A Framework for Learning to Request Rich and Contextually Useful Information from Humans Khanh Nguyen, Yonatan Bisk, Hal Daume III	2022
	39th International Conference on Machine Learning,	
30	Simulated Language Learning from Communicative Goals and Linguistic Input Hao Zhu, Yonatan Bisk, Graham Neubig Annual Meeting of the Cognitive Science Society (Oral)	2022
31	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, Yonatan Bisk Proceedings of Machine Learning Research (PMLR): NeurIPS 2021 Competition Track	2022
32	KAT: A Knowledge Augmented Transformer for Vision-and-Language Liangke Gui, Borui Wang, Qiuyuan Huang, Alexander Hauptmann, Yonatan Bisk, Jianfeng Gao Annual Conference of the North American Chapter of the Association for Computational	2022
33	Linguistics (Oral) FILM: Following Instructions in Language with Modular Methods So Yeon Min, Devendra Singh Chaplot, Pradeep Ravikumar, Yonatan Bisk, Ruslan Salakhutdinov	2022
	The Tenth International Conference on Learning Representations	
34	WebQA: Multihop and Multimodal QA Yingshan Chang, Mridu Narang, Hisami Suzuki, Guihong Cao, Jianfeng Gao, Yonatan Bisk Conference on Computer Vision and Pattern Recognition (Oral)	2022
35	Dependency Induction Through the Lens of Visual Perception Ruisi Su, Shruti Rijhwani, Hao Zhu, Junxian He, Xinyu Wang, Yonatan Bisk, Graham Neubig The SIGNLL Conference on Computational Natural Language Learning	2021
36	Language Grounding with 3D Objects Jesse Thomason, Mohit Shridhar, Yonatan Bisk, Chris Paxton, Luke Zettlemoyer	2021
	Conference on Robot Learning	
37	TACo: Token-aware Cascade Contrastive Learning for Video-Text Alignment Jianwei Yang, Yonatan Bisk, Jianfeng Gao International Conference on Computer Vision	2021
38	Few-shot Language Coordination by Modeling Theory of Mind Hao Zhu, Graham Neubig, Yonatan Bisk	2021
	The Thirty-eighth International Conference on Machine Learning	
39	Grounding 'Grounding' in NLP Khyathi Raghavi Chandu, Yonatan Bisk, Alan W Black Findings of The 2021 Conference of the Association for Computational Linguistics	2021
40	An Empirical Study on the Generalization Power of Neural Representations Learned via Visual Guessing Games Alessandro Suglia, Yonatan Bisk, Ioannis Konstas, Antonio Vergari, Emanuele Bastianelli, Andrea Vanzo, Oliver Lemon	2021
	The 2021 Conference of the European Chapter of the Association for Computational	
41	Linguistics (Oral) Knowledge-driven Data Construction for Zero-shot Evaluation in Commonsense Question Answering Kaixin Ma, Filip Ilievski, Jonathan Francis, Yonatan Bisk, Eric Nyberg, Alessandro Oltramari	2021
	35th AAAI Conference on Artificial Intelligence	
42	ALFWorld: Aligning Text and Embodied Environments for Interactive Learning Mohit Shridhar, Xingdi Yuan, Marc-Alexandre Côté, Yonatan Bisk, Adam Trischler, Matthew Hausknecht International Conference on Learning Representations	2021
	international Conference on Learning Nepresentations	

43	Imagining Grounded Conceptual Representations from Perceptual Information in Situated Guessing Games Alessandro Suglia, Antonio Vergari, Ioannis Konstas, Yonatan Bisk, Emanuele Bastianelli, Andrea Vanzo, Oliver Lemon	2020
	The 28th International Conference on Computational Linguistics (Oral)	
44	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 Conference on Empirical Methods in Natural Language Processing (Oral)	2020
45	RMM: A Recursive Mental Model for Dialog Navigation Homero Roman Roman, Yonatan Bisk, Jesse Thomason, Asli Celikyilmaz, Jianfeng Gao Conference on Empirical Methods in Natural Language Processing: Findings	2020
46	ALFRED: A Benchmark for Interpreting Grounded Instructions for Everyday	2020
10	Tasks Mohit Shridhar, Jesse Thomason, Daniel Gordon, <u>Yonatan Bisk</u> , Winson Han, Roozbeh Mottaghi, Luke Zettlemoyer, Dieter Fox	2020
	The IEEE Conference on Computer Vision and Pattern Recognition (CVPR)	
47	PIQA: Reasoning about Physical Commonsense in Natural Language Yonatan Bisk, Rowan Zellers, Ronan Le Bras, Jianfeng Gao, Yejin Choi Thirty-Fourth AAAI Conference on Artificial Intelligence (Oral)	2020
48	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	2019
	Conference on Empirical Methods in Natural Language Processing and 9th International Joint Conference on Natural Language Processing	
49	Defending Against Neural Fake News Rowan Zellers, Ari Holtzman, Hannah Rashkin, Yonatan Bisk, Ali Farhadi, Franziska Roesner, Yejin Choi	2019
	Thirty-third Conference on Neural Information Processing Systems	
50	Improving Robot Success Detection using Static Object Data Rosario Scalise, Jesse Thomason, Yonatan Bisk, Siddhartha Srinivasa	2019
	IEEE/RSJ International Conference on Intelligent Robots and Systems	
51	Early Fusion for Goal Directed Robotic Vision Aaron Walsman, Yonatan Bisk, Saadia Gabriel, Dipendra Misra, Yoav Artzi, Yejin Choi, Dieter Fox 2019 IEEE/RSJ International Conference on Intelligent Robots and Systems	2019
	- RoboCup Best Paper Award finalist	
52	HellaSwag: Can a Machine Really Finish Your Sentence? Rowan Zellers, Ari Holtzman, Yonatan Bisk, Ali Farhadi, Yejin Choi	2019
	Association for Computational Linguistics	
53	From Recognition to Cognition: Visual Commonsense Reasoning Rowan Zellers, Yonatan Bisk, Ali Farhadi, Yejin Choi	2019
	The IEEE Conference on Computer Vision and Pattern Recognition (Oral)	
54	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	2019
	The IEEE Conference on Computer Vision and Pattern Recognition (Oral)	
55	Prospection: Interpretable Plans From Language By Predicting the Future Chris Paxton, Yonatan Bisk, Jesse Thomason, Arunkumar Byravan, Dieter Fox	2019
F.C	International Conference on Robotics and Automation (ICRA)	0010
56	Shifting the Baseline: Single Modality Performance on Visual Navigation & QA Jesse Thomason, Daniel Gordon, Yonatan Bisk Appeal Conference of the North American Chapter of the Association for Computational	2019
	Annual Conference of the North American Chapter of the Association for Computational Linguistics	

57	Benchmarking Hierarchical Script Knowledge Yonatan Bisk, Jan Buys, Karl Pichotta, Yejin Choi	2019
	Annual Conference of the North American Chapter of the Association for Computational Linguistics (Oral)	
58	Character-based Surprisal as a Model of Reading Difficulty in the Presence of Errors	2019
	Michael Hahn, Frank Keller, <u>Yonatan Bisk</u> , Yonatan Belinkov The 41st Annual Meeting of the Cognitive Science Society (Oral)	
59	SWAG: A Large-Scale Adversarial Dataset for Grounded Commonsense Inference Rowan Zellers, Yonatan Bisk, Roy Schwartz, Yejin Choi	2018
	Conference on Empirical Methods in Natural Language Processing (Oral)	
60	Synthetic and Natural Noise Both Break Neural Machine Translation Yonatan Belinkov, Yonatan Bisk	2018
	6th International Conference on Learning Representations (Oral)	
61	Learning Interpretable Spatial Operations in a Rich 3D Blocks World Yonatan Bisk, Kevin Shih, Yejin Choi, Daniel Marcu	2018
	Thirty-Second Conference on Artificial Intelligence (AAAI-18)	
62	Natural Language Inference from Multiple Premises Alice Lai, Yonatan Bisk, Julia Hockenmaier	2017
	Eighth International Joint Conference on Natural Language Processing (Oral)	
63	Natural Language Communication with Robots Yonatan Bisk, Deniz Yuret, Daniel Marcu 15th Annual Conference of the North American Chapter of the Association for	2016
	Computational Linguistics (Oral)	
64	Supertagging with LSTMs	2016
	Ashish Vaswani, <u>Yonatan Bisk</u> , Kenji Sagae, Ryan Musa	
	15th Annual Conference of the North American Chapter of the Association for Computational Linguistics (Short Papers) (Oral)	
65	Evaluating Induced CCG Parsers on Grounded Semantic Parsing Yonatan Bisk, Siva Reddy, John Blitzer, Julia Hockenmaier, Mark Steedman	2016
	2016 Conference on Empirical Methods in Natural Language Processing	
66	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)	
67	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	
68	International Joint Conference on Natural Language Processing (Volume 2: Short Papers) Simple Robust Grammar Induction with Combinatory Categorial Grammar	2012
00	Yonatan Bisk, Julia Hockenmaier	2012
	Twenty-Sixth Conference on Artificial Intelligence (AAAI-12)	
69	Document-Topic Hierarchies from Document Graphs	2012
	Tim Weninger, Yonatan Bisk, Jiawei Han	
	21st ACM international conference on Information and knowledge management (CIKM	
70	2012) Normal-form parsing for CCGs with generalized composition and type-raising Julia Hockenmaier, Yonatan Bisk	2010
	23rd International Conference on Computational Linguistics (Coling 2010)	
	Workshop Publications	
71	MAEA: Multimodal Attribution for Embodied Al	2022
	Vidhi Jain, Jayant Sravan Tamarapalli, Sahiti Yerramilli, <u>Yonatan Bisk</u> Progress and Challenges in Building Trustworthy Embodied AI at NeurIPS 2022	

72	Tackling AlfWorld with Action Attention and Common Sense from Language Models Yue Wu, So Yeon Min, Yonatan Bisk, Ruslan Salakhutdinov, Shrimai Prabhumoye	2022
	Language and Reinforcement Learning Workshop at NeurIPS 2022	
73	Worst of Both Worlds: Biases Compound in Pre-trained Vision-and-Language Models Tejas Srinivasan, Yonatan Bisk	2022
	4th Workshop on Gender Bias in Natural Language Processing	
74	KB-VLP: Knowledge Based Vision and Language Pretraining Kezhen Chen, Qiuyuan Huang, Yonatan Bisk, Daniel McDuff, Jianfeng Gao ICML21 Workshop on Self-Supervised Learning	2021
75	A Benchmark for Structured Procedural Knowledge Extraction from Cooking Videos Frank F. Xu, Lei Ji, Botian Shi, Junyi Du, Graham Neubig, Yonatan Bisk, Nan Duan Workshop on NLP Beyond Text	2020
76	Inducing Grammars with and for Neural Machine Translation Ke Tran, Yonatan Bisk	2018
77	2nd Workshop on Neural Machine Translation (Best Paper) Bridging HMMs and RNNs through Architectural Transformations Jan Buys, Yonatan Bisk, Yejin Choi	2018
	32nd Conference on Neural Information Processing Systems (NIPS 2018), IRASL workshop	
78	Towards a Dataset for Human Computer Communication via Grounded Language Acquisition Yonatan Bisk, Daniel Marcu, William Wong	2016
	AAAI 2016 Workshop on Symbiotic Cognitive Systems	
79	Unsupervised Neural Hidden Markov Models Ke Tran, Yonatan Bisk, Ashish Vaswani, Daniel Marcu, Kevin Knight Workshop on Structured Prediction for NLP (Oral)	2016
80	Induction of Linguistic Structure with Combinatory Categorial Grammars Yonatan Bisk, Julia Hockenmaier NAACL HLT Workshop on Induction of Linguistic Structure	2012
	Preprint Publications	
81	DegustaBot: Zero-Shot Visual Preference Estimation for Personalized Multi-Object Rearrangement Benjamin A. Newman, Pranay Gupta, Kris Kitani, Yonatan Bisk, Henny Admoni, Chris Paxton	2024
	ArXiv	
82	How to Train Your Fact Verifier: Knowledge Transfer with Multimodal Open Models Jaeyoung Lee, Ximing Lu, Jack Hessel, Faeze Brahman, Youngjae Yu, Yonatan Bisk, Yejin Choi, Saadia Gabriel ArXiv	2024
83	Tools Fail: Detecting Silent Errors in Faulty Tools Jimin Sun, So Yeon Min, Yingshan Chang, Yonatan Bisk ArXiv	2024
84	Language Models Need Inductive Biases to Count Inductively Yingshan Chang, Yonatan Bisk	2024
85	ArXiv DiffusionPID: Interpreting Diffusion via Partial Information Decomposition Shaurya Dewan, Rushikesh Zawar, Prakanshul Saxena, Yingshan Chang, Andrew Luo, Yonatan Bisk ArXiv	2024

86	Dialogue with Robots: Proposals for Broadeni the SLIVAR Community Casey Kennington, Malihe Alikhani, Heather Pon-Barry Fried, Felix Gervits, Zhao Han, Mert Inan, Michael Joh Matthew Marge, Cynthia Matuszek, Ross Mead, Shiwa Parde, Jivko Sinapov, Angela Stewart, Matthew Stone, ArXiv	, Katherine Atwell, <u>Yonatan Bisk</u> , Daniel nston, Raj Korpan, Diane Litman, li Mohan, Raymond Mooney, Natalie	2024
87	Direct Preference Optimization of Video Large Language Model Reward Ruohong Zhang, Liangke Gui, Zhiqing Sun, Yihao Feng Chunyuan Li, Alexander Hauptmann, Yonatan Bisk, Yi ArXiv	g, Keyang Xu, Yuanhan Zhang, Di Fu,	2024
88	Toward General-Purpose Robots via Foundation Meta-Analysis Yafei Hu, Quanting Xie, Vidhi Jain, Jonathan Francis, Kim, Yaqi Xie, Tianyi Zhang, Shibo Zhao, Yu Quan Cl Johnson-Roberson, Dhruv Batra, Xiaolong Wang, Seban Yonatan Bisk ArXiv	Jay Patrikar, Nikhil Keetha, Seungchan nong, Chen Wang, Katia Sycara, Matthew	2023
89	Reasoning about the Unseen for Efficient Oute Quanting Xie, Tianyi Zhang, Kedi Xu, Matthew Johns ArXiv		2023
90	Plan, Eliminate, and Track – Language Model Agents Yue Wu, So Yeon Min, Yonatan Bisk, Ruslan Salakhut Mitchell, Shrimai Prabhumoye ArXiv		2023
91	Retrospectives on the Embodied Al Workshop Matt Deitke, Dhruv Batra, Yonatan Bisk, Tommaso Casingh Chaplot, Changan Chen, Claudia Pérez D'Arpino Anthony Francis, Chuang Gan, Kristen Grauman, Davi Aniruddha Kembhavi, Jacob Krantz, Stefan Lee, Cheng Maksymets, Roberto Martín-Martín, Roozbeh Mottagh Silvio Savarese, Manolis Savva, Mohit Shridhar, Niko Soshua B. Tenenbaum, Jesse Thomason, Alexander Towu ArXiv	ampari, Angel X. Chang, Devendra o, Kiana Ehsani, Ali Farhadi, Li Fei-Fei, d Hall, Winson Han, Unnat Jain, gshu Li, Sagnik Majumder, Oleksandr i, Sonia Raychaudhuri, Mike Roberts, ünderhauf, Andrew Szot, Ben Talbot,	2022
92	Multi-View Learning for Vision-and-Language Qiaolin Xia, Xiujun Li, Chunyuan Li, Yonatan Bisk, Zh A. Smith ArXiv		2020
93	FIND: Identifying Functionally and Structurally Sequences with Deep Neural Networks Ranjani Murali, James Hemp, Victoria Orphan, Yonata bioRxiv		2019
94	Balancing Shared Autonomy with Human-Rob Rosario Scalise, <u>Yonatan Bisk</u> , Maxwell Forbes, Daqing ArXiv		2018
95	CHALET: Cornell House Agent Learning Envir Claudia Yan, Dipendra Misra, Andrew Bennett, Aaron ArXiv Preprint 1801.07357		2018
_	Thesis Committees		
-	PhD Nikolaos Gkanatsios	Katerina Fragkiadak	i, CMU
-	PhD Gabe Sarch	Katerina Fragkiadaki and Mike Tar	r, CMU
-	PhD Seungchan Kim	Sebastian Schere	r, CMU

David Mortensen, CMU

- **PhD** Brendon Boldt

_	PhD Xiaoyu Zhu	Alex Hauptmann, CMU
_	PhD Liangke Gui	Alex Hauptmann, CMU
2024	PhD Jielin Qiu	Lei Li & Christos Faloutsos, CMU
2024	PhD Nikita Srivatsan	Taylor Berg-Kirkpatrick, CMU
2024	PhD Lijun Yu	Alex Hauptmann, CMU
2023	MSR Mateo Guaman Castro	Sebastian Scherer, CMU
2023	PhD Kaixin Ma	Eric Nyberg, CMU
2023	PhD Nicholas Botzer	Tim Weninger, Notre Dame
2023	PhD Naoki Otani	Ed Hovy, CMU
2023	PhD Dylan Ebert	Ellie Pavlick, Brown
2022	PhD Shikib Mehri	Maxine Eskenazi , CMU
2022	PhD Shruti Palaskar	Alan Black and Florian Metze, CMU
2022	PhD Evangelia Spiliopoulou	Ed Hovy, CMU
		•
2022	PhD Dheeraj Rajagopal	Ed Hovy, CMU
2022		Louis-Philippe Morency and Taylor Berg-Kirkpatrick, CMU
2022	MLT Aishwarya Jadhav	Katia Sycara, CMU
2021	PhD Pengcheng Yin	Graham Neubig, CMU
2020	PhD Zihang Dai	Yiming Yang, CMU
2021	MLT Jing Wen	Katerina Fragkiadaki, CMU
2021	Qual Mohit Sharma	Oliver Kroemer, CMU
	Teaching	
2024	11-851 Talking to Robots	, FA
2024	11-777 MultiModal Machine Learning	
	11-777 MultiModal Machine Learning	
2023	11-851 Talking to Robots (created)	# Students: 16 , FA
2023	11-767 On-Device Machine Learning	•
	11-707 Oil-Device Machine Learning 11-777 MultiModal Machine Learning	Co-Emma Strubell # Students: 69 , FA
2022	_	
2022	11-767 On-Device Machine Learning	Co-Emma Strubell # Students: 42 , FA
	11-777 MultiModal Machine Learning	•••
2021	11-767 On-Device Machine Learning	
	11-777 MultiModal Machine Learning	# Students: 42 , SP
	Diversity and Inclusion	
2022	NAACL 2022 DEI Co-Chair	
2021	Restructuring of LTI PhD Admissions,	. 2yr
2020	LTI DEI Committee,	2yrs
2019		eries targeted at high-school age viewers. Hosted by Jabril
-	Ashe. Co-Written with Lana Yarosh and	
2018	ACM Council on Diversity & Inclusion ACM on behalf of underrepresented group	Investigating and initiating institutional change within os., 1yr
_	Grace Hopper PC member Review sub	-
2016		cations for the National Center for Women & Information
	Technology's Collegiate Award honoring of	college women, ISI 3yrs
2009	•	view applications for the National Center for Women &
	interested in CS, UIUC, ISI	rations in Computing which supports high-school girls 6yrs

-	Tech Junket/Women in CS Outreach for local Urbana-Champaign pre-college stude 2yrs	ents, UIUC
2008	Freshman Research Mentor Mentored students to perform research, UTexas	1yr
_	First Bytes Helped organize a summer camp for girls interested in CS, UTexas	,
_	Co-Founded Breakfast Bytes Professor talks for pre-college students, UTexas	1yr
_	CS Roadshow CS presentations at Austin middle and high schools, UTexas	1yr
_	(Senior) Area Chair / Action Editor	
2024	Conference on Robot Learning (CoRL)	Robo
_	Conference on Computer Vision and Pattern Recognition (CVPR)	CV
_	International Conference on Learning Representations (ICLR)	AI/ML
_	European Chapter of the Association for Computational Linguistics (EACL)	NLP
_	Senior AE: ACL Rolling Review (ARR)	NLP
_	AE: Transactions on Machine Learning Research (TMLR)	AI/ML
2023	Neural Information Processing Systems (NeurIPS)	AI/ML
_	International Conference on Machine Learning (ICML)	AI/ML
_	AE: Transactions on Machine Learning Research (TMLR)	AI/ML
_	Senior AE: ACL Rolling Review (ARR)	NLP
_	Ethics Co-Chair: Association for Computational Linguistics (ACL)	NLP
_	Empirical Methods in Natural Language Proc (EMNLP)	NLP
2022	International Conference on Learning Representations (ICLR)	AI/ML
_	Senior MR: Association for the Advancement of Artificial Intelligence (AAAI)	AI/ML
_	Senior AC: Empirical Methods in Natural Language Proc (EMNLP)	NLP
_	AE: Transactions on Machine Learning Research (TMLR)	AI/ML
_	Senior AE: ACL Rolling Review (ARR)	NLP
-	Neural Information Processing Systems (NeurIPS)	AI/ML
2021	International Conference on Learning Representations (ICLR)	AI/ML NLP
_	Association for Computational Linguistics (ACL)	NLP NLP
_	Empirical Methods in Natural Language Proc (EMNLP) Neural Information Processing Systems (NeurIPS)	AI/ML
_	ACL Rolling Review (ARR)	NLP
2020	Association for Computational Linguistics (ACL)	NLP
2020	Neural Information Processing Systems (NeurIPS)	AI/ML
_	Asia-Pacific chapter of the Association for Computational Linguistics (AACL)	NLP
2019	Association for Computational Linguistics (ACL)	NLP
2018	International Conference on Computational Linguistics	NLP
2016	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
	IJCNLP International Joint Conference on Natural Language Processing	2017

	NAACL	N. American Chapter of the Association for Computational Ling	2016 – 2019
	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 - 2024
	ICRA	International Conference on Robotics and Automation	2019,2023, 2024
	IJRR	International Journal of Robotics Research	2017
	IROS	IEEE/RSJ International Conference on Intelligent Robots and System	ms <i>2019,23–24</i>
	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	2019 – 2020
	ICML	International Conference on Machine Learning	2019
	IJCAI	International Joint Conference on Artificial Intelligence	2019
	NeurIPS	Neural Information Processing Systems	2018 – 2019
CV	CVPR	Computer Vision and Pattern Recognition	2020, 2023

Organization (Workshops and Conference)

- 2022 **Workshop** *Embodied AI Workshop Challenge Organizer* Computer Vision and Pattern Recognition
- 2021 **Workshop** *Embodied Al Workshop Challenge Organizer* Computer Vision and Pattern Recognition
- 2020 **Workshop** *Embodied Vision, Actions & Language Workshop* European Conference on Computer Vision
 - Workshop Workshop on Dataset Curation and Security NeurIPS
- 2019 **Workshop** Spatial Language Understanding and Grounded communication for Robotics North American Chapter of the Association for Computational Linguistics
- 2018 Conference Social Media Chair

North American Chapter of the Association for Computational Linguistics

- Workshop Generalization in the Age of Deep Learning
 North American Chapter of the Association for Computational Linguistics
- Workshop Wordplay: Reinformcent and Language Learning in Text-Based Games NeurIPS
- 2017 **Conference** Student Scholarship Chair and Student Volunteer Coordinator Conference on Empirical Methods in Natural Language Processing
 - Workshop Language Grounding for Robotics
 Conference of the Association for Computational Linguistics

Invitations and Talks

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

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-Al 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 Al 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 Al

- 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