# 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) | |
| 2022 – | **Visiting Professor** *Meta Fundamental AI 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

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|---|---|
| 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 | **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* | | LTI | 2022 – |

## Research MS Students

| | | | | | |
|---|---|---|---|---|---|
| MLT | **Jimin Sun** | she/her | *Embodied Dialogue* | LTI | 2022 – |

## Professional Masters Students

| | | |
|---|---|---|
| MRSD | **Assistive Robotics for Eldercare (*co-Z Erickson)** | 2023 |

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|---|---|---|---|
| Abhinav Gupta | he/him | Atharva Pusalkar | he/him |
| Praveen Venkatesh | he/him | Shaolin Kataria | he/him |
| Shivam Tripathy | he/him | | |

## Alumni, Interns, and Undergraduates

| | | | | |
|---|---|---|---|---|
| Ugrad | **Xiang Fan** | *Transformer Efficiency* | *(co-E Strubell)* | 2022 |
| Intern | **Andy Liu** | *Theory-of-Mind* | *(co-G Neubig)* | 2022 |
| Intern | **Deogratias Amani** | he/him *Grounding* | | 2022 |

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|---|---|---|---|---|---|---|
| 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 | | |

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|---|---|---|---|---|---|
| MLT | **Yingshan Chang** | she/her | *Multimodal Reasoning* | LTI | 2020 − 2022 |
| MLT | **Josh Zhanson** | he/him | *Embodied Visual Reps* | LTI | 2020 − 2022 |
| MS | **Xiaoyu (Erin) Zhang** | she/her | *Collaborative Robots* (co-O Kroemer) | 5th | 2021 − 2022 |
| Ugrad | **Feiyu (Gavin) Zhu** | | *Video Summarization* (co-C Paxton) | | 2021 |
| Intern | **Melanie Sclar** | | *Symmetric Theory-of-Mind* (co-G Neubig) | | 2021 |
| Intern | **Blessing Bassey** | | *TextVQA* | | 2021 |

## Journal Publications

1. **The Return of Lexical Dependencies: Neural Lexicalized PCFGs** 2020
Hao Zhu, <u>Yonatan Bisk</u>, Graham Neubig
*Transactions of the Association for Computational Linguistics*

2. **An HDP Model for Inducing Combinatory Categorial Grammars** 2013
<u>Yonatan Bisk</u>, Julia Hockenmaier
*Transactions of the Association for Computational Linguistics*

## Conference Publications

3. **Computational Language Acquisition with Theory of Mind** 2023
Andy Liu, Hao Zhu, Emmy Liu, <u>Yonatan Bisk</u>, Graham Neubig
*The Eleventh International Conference on Learning Representations*

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

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

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

7. **Transformers are Adaptable Task Planners** 2022
Vidhi Jain, Yixin Lin, Eric Undersander, <u>Yonatan Bisk</u>, Akshara Rai
*Conference on Robot Learning*

8. **Symmetric Machine Theory of Mind** 2022
Melanie Sclar, Graham Neubig, <u>Yonatan Bisk</u>
*39th International Conference on Machine Learning*

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

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

11. **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>
*Proceedings of Machine Learning Research (PMLR): NeurIPS 2021 Competition Track*
2022

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

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

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

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

16. **Language Grounding with 3D Objects**
Jesse Thomason, Mohit Shridhar, <u>Yonatan Bisk</u>, Chris Paxton, Luke Zettlemoyer
*Conference on Robot Learning*
2021

17. **TACo: Token-aware Cascade Contrastive Learning for Video-Text Alignment**
Jianwei Yang, <u>Yonatan Bisk</u>, Jianfeng Gao
*International Conference on Computer Vision*
2021

18. **Few-shot Language Coordination by Modeling Theory of Mind**
Hao Zhu, Graham Neubig, <u>Yonatan Bisk</u>
*The Thirty-eighth International Conference on Machine Learning*
2021

19. **Grounding 'Grounding' in NLP**
Khyathi Raghavi Chandu, <u>Yonatan Bisk</u>, Alan W Black
*Findings of The 2021 Conference of the Association for Computational Linguistics*
2021

20. **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
*The 2021 Conference of the European Chapter of the Association for Computational Linguistics (Oral)*
2021

21. **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
*35th AAAI Conference on Artificial Intelligence*
2021

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

23. **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
*The 28th International Conference on Computational Linguistics (Oral)*
2020

24. **Experience Grounds Language**                                                             2020
    <u>Yonatan Bisk</u>, 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 (EMNLP) (Oral)*

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

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

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

28. **Robust Navigation with Language Pretraining and Stochastic Sampling**                      2019
    Xiujun Li, Chunyuan Li, Qiaolin Xia, <u>Yonatan Bisk</u>, 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*

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

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

31. **Early Fusion for Goal Directed Robotic Vision**                                            2019
    Aaron Walsman, <u>Yonatan Bisk</u>, Saadia Gabriel, Dipendra Misra, Yoav Artzi, Yejin Choi, Dieter
    Fox
    *2019 IEEE/RSJ International Conference on Intelligent Robots and Systems*

32. **HellaSwag: Can a Machine Really Finish Your Sentence?**                                    2019
    Rowan Zellers, Ari Holtzman, <u>Yonatan Bisk</u>, Ali Farhadi, Yejin Choi
    *Association for Computational Linguistics*

33. **From Recognition to Cognition: Visual Commonsense Reasoning**                              2019
    Rowan Zellers, <u>Yonatan Bisk</u>, Ali Farhadi, Yejin Choi
    *The IEEE Conference on Computer Vision and Pattern Recognition (CVPR) (Oral)*

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

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

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

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

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

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

40. **Synthetic and Natural Noise Both Break Neural Machine Translation**  2018
Yonatan Belinkov, <u>Yonatan Bisk</u>
*6th International Conference on Learning Representations (Oral)*

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

42. **Natural Language Inference from Multiple Premises**  2017
Alice Lai, <u>Yonatan Bisk</u>, Julia Hockenmaier
*Eighth International Joint Conference on Natural Language Processing (Oral)*

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

44. **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)*

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

46. **Probing the Linguistic Strengths and Limitations of Unsupervised Grammar Induction**  2015
<u>Yonatan Bisk</u>, 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)*

47. **Labeled Grammar Induction with Minimal Supervision**  2015
<u>Yonatan Bisk</u>, 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)*

48. **Simple Robust Grammar Induction with Combinatory Categorial Grammar**  2012
<u>Yonatan Bisk</u>, Julia Hockenmaier
*Twenty-Sixth Conference on Artificial Intelligence (AAAI-12)*

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

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

## Workshop Publications

51. **MAEA: Multimodal Attribution for Embodied AI**  2022
Vidhi Jain, Jayant Sravan Tamarapalli, Sahiti Yerramilli, <u>Yonatan Bisk</u>
*Progress and Challenges in Building Trustworthy Embodied AI at NeurIPS 2022*

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

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

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

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

56. **Inducing Grammars with and for Neural Machine Translation**  2018
Ke Tran, <u>Yonatan Bisk</u>
*2nd Workshop on Neural Machine Translation*

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

58. **Towards a Dataset for Human Computer Communication via Grounded Language Acquisition**  2016
<u>Yonatan Bisk</u>, Daniel Marcu, William Wong
*AAAI 2016 Workshop on Symbiotic Cognitive Systems*

59. **Unsupervised Neural Hidden Markov Models**  2016
Ke Tran, <u>Yonatan Bisk</u>, Ashish Vaswani, Daniel Marcu, Kevin Knight
*Workshop on Structured Prediction for NLP (Oral)*

60. **Induction of Linguistic Structure with Combinatory Categorial Grammars**  2012
<u>Yonatan Bisk</u>, Julia Hockenmaier
*NAACL HLT Workshop on Induction of Linguistic Structure*

## Tech Reports

61. **Object Goal Navigation with End-to-End Self-Supervision**  2022
So Yeon Min, Yao-Hung Hubert Tsai, Wei Ding, Ali Farhadi, Ruslan Salakhutdinov, <u>Yonatan Bisk</u>, Jian Zhang
*ArXiv*

62. **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
*ArXiv*

63. **Training Vision-Language Transformers from Captions Alone**  2022
Liangke Gui, Qiuyuan Huang, Alex Hauptmann, <u>Yonatan Bisk</u>, Jianfeng Gao
*ArXiv*

64. **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
*ArXiv*

65. **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>
*bioRxiv*

66. **CHALET: Cornell House Agent Learning Environment**  2018
Claudia Yan, Dipendra Misra, Andrew Bennett, Aaron Walsman, <u>Yonatan Bisk</u>, Yoav Artzi
*ArXiv Preprint 1801.07357*

67. **Unsupervised Grammar Induction with Combinatory Categorial Grammars**  2015
<u>Yonatan Bisk</u>
*University of Illinois at Urbana-Champaign*

## Thesis Committees

– **PhD** *Nicholas Botzer*  Tim Weninger, Notre Dame
– **PhD** *Kaixin Ma*  Eric Nyberg, CMU

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|---|---|---|---|
| – | **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 | **PhD** *Volkan Cirik* | | Louis-Philippe Morency and Taylor Berg-Kirkpatrick, CMU |
| 2022 | **MLT** *Aishwarya Jadhav* | | Katia Sycara, CMU |
| 2021 | **PhD** *Pengcheng Yin* | | Graham Neubig, CMU |
| 2020 | **PhD** *Zihang Dai* | | Yiming Yang, CMU |
| 2021 | **MLT** *Jing Wen* | | Katerina Fragkiadaki, CMU |
| 2021 | **Qual** *Mohit Sharma* | | Oliver Kroemer, CMU |

## Teaching

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|---|---|---|---|
| 2021 | **11-777 MultiModal Machine Learning** | | # Students: 42, SP |
| 2021 | **11-767 On-Device Machine Learning** | *Co-Emma Strubell* | # Students: 31, FA |
| 2022 | **11-777 MultiModal Machine Learning** | | # Students: 94, SP |
| 2022 | **11-767 On-Device Machine Learning** | *Co-Emma Strubell* | # Students: 42, FA |

## Diversity and Inclusion

| | | |
|---|---|---|
| 2022 | **NAACL 2022 DEI Co-Chair** | |
| 2021 | **Restructuring of LTI PhD Admissions**, | ongoing |
| 2020 | **LTI DEI Committee**, | 2yrs |
| 2019 | **CrashCourse AI** Educational YouTube series targeted at high-school age viewers. Hosted by Jabril Ashe. Co-Written with Lana Yarosh and Tim Weninger, | *1yr* |
| 2018 | **ACM Council on Diversity & Inclusion** Investigating and initiating institutional change within ACM on behalf of underrepresented groups., | *1yr* |
| – | **Grace Hopper PC member** Review submissions to AI Technical Track, | *1yr* |
| 2016 | **NCWIT Collegiate Award** Review applications for the National Center for Women & Information Technology's Collegiate Award honoring college women, ISI | *3yrs* |
| 2009 | **NCWIT Aspirations in Computing** Review applications for the National Center for Women & Information Technology's Award for Aspirations in Computing which supports high-school girls interested in CS, UIUC, ISI | *6yrs* |
| – | **Tech Junket/Women in CS** Outreach for local Urbana-Champaign pre-college students, UIUC *2yrs* | |
| 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* |

## Organization (Workshops and Conference)

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|---|---|
| 2022 | **Workshop** *Embodied AI Workshop – Challenge Organizer* <br> Computer Vision and Pattern Recognition |
| 2021 | **Workshop** *Embodied AI Workshop – Challenge Organizer* <br> Computer Vision and Pattern Recognition |
| 2020 | **Workshop** *Embodied Vision, Actions & Language Workshop* <br> European Conference on Computer Vision |
| – | **Workshop** *Workshop on Dataset Curation and Security* <br> 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

## Area Chair / Action Editor

2022    **International Conference on Learning Representations**

–    **Association for the Advancement of Artificial Intelligence** *Senior Meta-Reviewer*

–    **Empirical Methods in Natural Language Proc** *Senior AC: Speech, Vision, Robotics, Multimodal Grounding*

–    **Transactions on Machine Learning Research** *Action Editor*

–    **Senior AE: ACL Rolling Review**

–    **Neural Information Processing Systems (NeurIPS)**

2021    **International Conference on Learning Representations**

–    **Association for Computational Linguistics** *Machine Learning*

–    **Empirical Methods in Natural Language Proc** *Speech, Vision, Robotics, Multimodal Grounding*

–    **Neural Information Processing Systems (NeurIPS)**

–    **ACL Rolling Review**

2020    **Association for Computational Linguistics** *Language Grounding to Vision, Robotics and Beyond*

–    **Neural Information Processing Systems (NeurIPS)**

–    **Asia-Pacific chapter of the Association for Computational Linguistics**

2019    **Association for Computational Linguistics** *Vision, Robotics, Multimodal Grounding, and Speech*

2018    **International Conference on Computational Linguistics**

2016    **Conference on Lexical and Computational Semantics (*SEM)** *Sem. Parsing and Role Labeling*

## 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* |

| Robo | CoRL | Conference on Robot Learning | *2019 – 2021* |
|---|---|---|---|
| | **AURO** | Autonomous Robots | *2022* |
| | **RSS** | Robotics: Science and Systems | *2022* |
| | **HRI** | Human Robot Interaction | *2020 – 2023* |
| | **ICRA** | International Conference on Robotics and Automation | *2019,2023* |
| | **IJRR** | International Journal of Robotics Research | *2017* |
| | **IROS** | IEEE/RSJ International Conference on Intelligent Robots and Systems | *2019* |
| | **RA-L** | IEEE Robotics and Automation Letters | *2019* |
| 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* |

## Invitations and Talks

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*