Vanya Peter Cohen

Education

- 2021-Now **Ph.D. in Computer Science**, The University of Texas at Austin.
 - O Advised by Ray Mooney.
 - Expected Graduation: 05/26
- 2017-2018 M.Sc. in Computer Science, Brown University, Providence, RI.
 - O Co-advised by Stefanie Tellex and George Konidaris.
- 2013-2017 B.Sc. in Computer Science, Brown University, Providence, RI.

Selected Publications

- TMLR 2024 Compositional Instruction Following with Language Models and Reinforcement Learning
 - Vanya Cohen*, Geraud Nangue Tasse*, Nakul Gopalan, Steven James, Matthew Gombolay, Ray Mooney, Benjamin Rosman
 - Transactions on Machine Learning Research (TMLR), 2024
 - EMNLP CaT-Bench: Benchmarking Language Model Understanding of 2024 Causal and Temporal Dependencies in Plans
 - Yash Kumar Lal*, **Vanya Cohen***, Nathanael Chambers, Niranjan Balasubramanian, Raymond Mooney
 - Conference on Empirical Methods in Natural Language Processing (EMNLP), 2024
- IJCAI A Survey of Robotic Language Grounding: Tradeoffs Between Sym-Survey Track bols and Embeddings
 - 2024 **Vanya Cohen***, Jason Xinyu Liu*, Raymond Mooney*, Stefanie Tellex*, David Watkins*
 - International Joint Conference on Artificial Intelligence: Survey Track (IJCAI: Survey Track), 2024
 - ICRA 2024 CAPE: Corrective Actions from Precondition Errors using Large Language Models
 - Shreyas Sundara Raman, **Vanya Cohen**, Ifrah Idrees, Eric Rosen, Ray Mooney, Stefanie Tellex, David Paulius
 - IEEE International Conference on Robotics and Automation (ICRA), 2024
 - NeurIPS OpenGPT-2: Replicating a 1.5 Billion Parameter Language Model
 - 2019 Aaron Gokaslan*, Vanya Cohen*, Ellie Pavlick, Stefanie Tellex
 - Workshop NeurIPS NewInML Workshop, 2019
 - IROS 2019 Grounding Language Attributes to Objects using Bayesian Eigenobjects
 - Vanya Cohen*, Benjamin Burchfiel*, Thao Nguyen*, Nakul Gopalan, Stefanie Tellex, George Konidaris
 - IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), 2019

Research Experience

2021-Now Machine Learning Research Group - UT Austin

Ph.D. Student.

Focus Areas: Grounded natural language processing, reinforcement learning, robotics; Language-driven agents interacting in complex environments.

2020-Now Blackbird.AI

AI Scientist '24 & Consultant/ML Engineer '20-'23.

Focus Areas: Multimodal agents for information retrieval, embeddings.

2019-2020 Luminoso Technologies Inc.

Machine Learning Engineer.

Focus Areas: Language models for semantic networks; ConceptNet.

2017-2019 Humans to Robots Lab – Brown University

Research Assistant; Advised by Stefanie Tellex and George Konidaris.

Focus Areas: Language instruction following for manipulation, human-robot interaction, language grounding.

2016-2017 Brown University Graphics Lab

Undergraduate Research Assistant; Advised by Andy van Dam.

Focus Areas: Collaborative gesture & multi-touch user interfaces.

Honors & Awards

2023 Phi Kappa Phi Honor Society

Inducted for academic excellence during Ph.D. program.

Professional Activities

Workshop Organization

NeurIPS Co-Organizer for NewInML: A Workshop for Newcomers to Machine

2020 Learning at NeurIPS 2020

Workshop Zhen Xu (UPSaclay), Vanya Cohen, Shruti Mishra (Harvard), MingYu Lu (UW)

Reviewer

2025- International Joint Conference on Artificial Intelligence (IJCAI)

2024- Robotics: Science and Systems (RSS)

2023 International Conference on Robotics and Automation (ICRA)

University Service

2022-2024 Organized the Connecting Language and Machine Perception (CLAMP) Reading Group, bringing together students and faculty from NLP, robotics, CV, linguistics, and CogSci to discuss recent grounded language processing papers.