Vanya Peter Cohen

Education

2021-Now **Ph.D. in Computer Science**, The University of Texas at Austin.

O Advised by Ray Mooney.

O Graduation (anticipated) 05/2026

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.

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 fact checking, 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 interac-

tion, 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.

Peer-Reviewed Academic 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
TICAL 2024	Conference on Empirical Methods in Natural Language Processing (EMNLP), 2024
IJCAI 2024	A Survey of Robotic Language Grounding: Tradeoffs Between Symbols 12 Parks
	bols and Embeddings
	Vanya Cohen*, Jason Xinyu Liu*, Raymond Mooney*, Stefanie Tellex*, David Watkins*
	International Joint Conference on Artificial Intelligence (IJCAI), 2024
ICRA 2024	, , , , , , , , , , , , , , , , , , , ,
	guage Models
	Shreyas Sundara Raman, Vanya Cohen, Ifrah Idrees, Eric Rosen, Ray Mooney, Ste-
	fanie Tellex, David Paulius
	IEEE International Conference on Robotics and Automation (ICRA), 2024
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
	1EEE/1655 International Conference on Interligent 100008 and Systems (IIIOS), 2019
	Non-Archival Publications & Preprints
ACL 2023	Using Planning to Improve Semantic Parsing of Instructional Texts
Workshop	Vanya Cohen, Raymond Mooney
1	Workshop on Natural Language Reasoning and Structured Explanations at ACL, 2023
CoRL 2022	End-to-End Learning to Follow Language Instructions with Compo-
Workshop	sitional Policies
	Vanya Cohen*, Geraud Nangue Tasse*, Nakul Gopalan, Steven James, Ray Mooney,
	Benjamin Rosman
	Workshop on Language and Robotics at the Conference on Robot Learning (CoRL), 2022
NeurIPS	Planning with Large Language Models via Corrective Re-Prompting
2022	Shreyas Sundara Raman, Vanya Cohen, Eric Rosen, Ifrah Idrees, David Paulius,
Workshop	Stefanie Tellex
	Foundation Models for Decision Making Workshop at NeurIPS, 2022

AAAI-FSS Learning to Follow Language Instructions with Compositional

2021 Policies

Vanya Cohen*, Geraud Nangue Tasse*, Nakul Gopalan, Steven James, Matthew Gombolay, Benjamin Rosman

AI-HRI Symposium at AAAI Fall Symposium Series (AAAI-FSS), 2021

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

Invited Articles

XRDS 2020 OpenGPT-2: Open Language Models and Implications of Generated Text

Vanya Cohen, Aaron Gokaslan

XRDS: Crossroads, The ACM Magazine for Students, Fall 2020

Speaking & Interviews

Hack@Brown Brown University Hackathon Alumni Panelist

2024 Invited speaker for the alumni panel at Brown's annual hackathon.

Wired OpenAI Said Its Code Was Risky. Two Grads Re-Created It Anyway.

August 2019 Interviewed by Tom Simonite.

Other Work Experience

2017-2018 National Bureau of Economic Research - UCLA/Brown

Part-time Research Engineer.

Developed AWS web-scapers and parsers to construct large-scale datasets of financial disclosures for an econometrics research team.

Summer **TripAdvisor**, Palo Alto, CA

2016 Software Engineering Intern (Full-stack iOS Developer).

Optimized iOS map features, cutting load times by 50%, and redesigned travel guides to boost user engagement.

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.