
Education

- 2021-Now **Ph.D. in Computer Science**, The University of Texas at Austin.
○ Advised by [Ray Mooney](#).
- 2017-2018 **M.Sc. in Computer Science**, Brown University, Providence, RI.
○ 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 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.

Peer-Reviewed Academic Publications

- EMNLP 2024 **CaT-Bench: Benchmarking Language Model Understanding of 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 2024 **A Survey of Robotic Language Grounding: Tradeoffs Between Symbols and Embeddings**
Vanya Cohen*, Jason Xinyu Liu*, Raymond Mooney*, Stefanie Tellex*, David Watkins*
International Joint Conference on Artificial Intelligence (IJCAI), 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
- 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

Non-Archival Publications & Preprints

- ACL 2023 **Using Planning to Improve Semantic Parsing of Instructional Texts**
Workshop Vanya Cohen, Raymond Mooney
Workshop on Natural Language Reasoning and Structured Explanations at ACL, 2023
- CoRL 2022 **End-to-End Learning to Follow Language Instructions with Compositional Policies**
Workshop 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 2022 **Planning with Large Language Models via Corrective Re-Prompting**
Workshop Shreyas Sundara Raman, Vanya Cohen, Eric Rosen, Ifrah Idrees, David Paulius, Stefanie Tellex
Foundation Models for Decision Making Workshop at NeurIPS, 2022
- AAAI-FSS 2021 **Learning to Follow Language Instructions with Compositional 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 2019 **OpenGPT-2: Replicating a 1.5 Billion Parameter Language Model**
Workshop Aaron Gokaslan*, Vanya Cohen*, Ellie Pavlick, Stefanie Tellex
NeurIPS NewInML Workshop, 2019

Other 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-scrapers 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 Learning at NeurIPS 2020**

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

Reviewer

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.