

NICHOLAS E. CORRADO

✉ ncorrado@wisc.edu

☎ (412) 417-1383

🌐 nicholascorrado.github.io

EDUCATION

University of Wisconsin – Madison, Madison, WI

Present

Ph.D., Computer Sciences

Advisor: [Josiah Hanna](#)

University of Pittsburgh, Pittsburgh, PA

2019

B.S. in Physics, Mathematics; Minor in Computer Science

Thesis: [A Search for \$W_{bJ}\$ in Decays of \$\Upsilon\(5S\)\$: An Analysis Design Study](#)

Advisor: [Vladimir Savinov](#)

EXPERIENCE

University of Wisconsin–Madison | Graduate Research Assistant

Jan. 2021 – Present

Advisor: Josiah Hanna

- My research focuses on data collection and data quality in reinforcement learning.

Amazon | Applied Scientist Intern

July 2024 – Nov. 2024

Advisors: Julian Katz-Samuels, Hyokun Yun, Yi Xu

- Multi-task alignment for LLMs with the [Rufus Team](#).

Sandia National Laboratories | Graduate Research Intern

May 2021 – Nov. 2023

Advisor: Drew Levin

- Reinforcement learning for power systems management. From May 2022 - Nov 2023, I served as a consultant.

University of Wisconsin – Madison | Graduate Research Assistant

Sept. 2019 – Sept. 2020

Advisor: Jignesh Patel

- Focused on query execution algorithms. I built the query execution and storage engines for [Hustle](#).

University of Pittsburgh | Undergraduate Research Assistant

Oct. 2016 - Aug. 2019

Advisor: Vladimir Savinov

- Designed the first search for W_{bJ} states in data collected by the Belle experiment.

PAPERS

Manuscripts Under Review

[M1] **Centralized Adaptive Sampling for Reliable Co-training of Independent Multi-Agent Policies**

[Nicholas E. Corrado](#), Josiah P. Hanna

Under Review, 2025.

[M2] **On-Policy Policy Gradient Reinforcement Learning Without On-Policy Sampling**

[Nicholas E. Corrado](#), Josiah P. Hanna

arXiv preprint arXiv:2311.08290, 2023.

Conference Publications

[C1] **When Can Model-Free Reinforcement Learning be Enough for Thinking?**

Josiah P. Hanna, [Nicholas E. Corrado](#)

Neural Information Processing Systems (NeurIPS), 2025.

[C2] **AutoMixAlign: Adaptive Data Mixing for Multi-Task Preference Optimization in LLMs**


[Nicholas E. Corrado](#), Julian Katz-Samuels, Adithya M Devraj, Hyokun Yun, Chao Zhang, Yi Xu, Yi Pan, Bing Yin, Trishul Chilimbi

Association for Computational Linguistics (ACL), 2025. (Acceptance Rate: 20.3%)

+ Amazon Machine Learning Conference (AMLC), 2025 (**Oral**).

- [C3] **Guided Data Augmentation for Offline Reinforcement Learning and Imitation Learning**
Nicholas E. Corrado, Yuxiao Qu, John U. Balis, Adam Labiosa, Josiah P. Hanna
 Reinforcement Learning Conference (RLC), 2024.
- [C4] **Understanding when Dynamics-Invariant Data Augmentations Benefit Model-Free Reinforcement Learning Updates**
Nicholas E. Corrado, Josiah P. Hanna
 International Conference on Learning Representations (ICLR), 2024. (Acceptance Rate: 30.8%)
- [C5] **Deep Reinforcement Learning for Distribution Power System Cyber-Resilience via Distributed Energy Resource Control**
Nicholas E. Corrado, Michael Livesay, Jay Johnson, Drew Levin
 IEEE International Conference on Communications, Control, and Computing Technologies for Smart Grids (IEEE SmartGridComm), 2023.
- [C6] **Simulation-Acquired Latent Action Spaces for Dynamics Generalization**
Nicholas E. Corrado, Yuxiao Qu, Josiah P. Hanna
 Conference on Lifelong Learning Agents (CoLLAs), 2022.

Workshop Papers

- [W1] **Thinking is Another Form of Control**
 Josiah P. Hanna, Nicholas E. Corrado
 Finding the Frame Workshop at the Reinforcement Learning Conference (RLC), 2025. **(Oral)**.
 **Awarded “Most-Thought-Provoking Paper”**
- [W2] **On-Policy Policy Gradient Reinforcement Learning Without On-Policy Sampling**
Nicholas E. Corrado, Josiah P. Hanna
 Finding the Frame Workshop at the Reinforcement Learning Conference (RLC), 2025.

HONORS & AWARDS

- ▶ **Top Reviewer Award, NeurIPS 2024 (Top 8%)** 2024
- ▶ **Sandia Employee Recognition Award.** Awarded to < 10% of the Sandia workforce 2023
- ▶ **UW-Madison CS Department Scholarship (\$3000).** Awarded to top graduate applicants. 2019
- ▶ **John O. Blumberg Memorial Scholarship (\$1000).** Awarded to the top math major. 2019
- ▶ Pennsylvania Space Grant Consortium Scholarship (third time, \$1500). Research funding. 2019
- ▶ Emil Sanielevici Scholarship (\$4000). Research funding. 2018
- ▶ Pennsylvania Space Grant Consortium Scholarship (second time, \$1500). Research funding. 2018
- ▶ J&M Bigos Memorial Scholarship (\$10,000). Awarded for academic excellence. 2018
- ▶ Sigma Pi Sigma Physics Honor Society 2018
- ▶ American Physical Society DPF Travel Award (\$200) 2017
- ▶ **Peter F.M. Koehler Award (\$500).** Awarded to the top physics major. 2017
- ▶ Brackenridge Summer Research Fellowship (\$3500). Research funding. 2017.
- ▶ Rebecca Dytman Scholarship (\$10,000). Awarded for academic excellence in physics and astronomy. 2017
- ▶ Pennsylvania Space Grant Consortium Scholarship (first time, \$1500). Research funding. 2017

TALKS

- ▶ **On-Policy Policy Gradient Reinforcement Learning Without On-Policy Sampling** 2023
 University of Edinburgh RL Reading Group [\[video\]](#)

ADVISING

- ▶ Harry Huang (Undergraduate, University of Wisconsin-Madison, WISCERS program) 2025
- ▶ Nora Tseng (Undergraduate, University of Wisconsin-Madison, WISCERS program) 2024
- Next: **MS @ UC San Diego**
- ▶ Yuxiao Qu (Undergraduate, University of Wisconsin-Madison) 2021-2023
- Next: **PhD @ Carnegie Mellon University**

TEACHING EXPERIENCE

University of Wisconsin–Madison	
▶ Research Mentor Program (Part of the Delta Program)	Fall 2023
▶ Teaching Assistant for <i>Mathematical Foundations of Machine Learning (CS 761)</i>	Fall 2021
▶ Head Teaching Assistant for <i>Intro to Computer Systems (CS 354)</i>	Fall 2021
▶ Teaching Assistant for <i>Problem Solving for Engineers (CS 310)</i>	Spring 2021
▶ Teaching Assistant for <i>Discrete Mathematics (CS 240)</i>	Fall 2020
University of Pittsburgh	
▶ Teaching Assistant for <i>Quantum Mechanics (PHYS 1370)</i>	Fall 2018

SERVICE

▶ MadML Seminar Co-Organizer (University of Wisconsin-Madison)	2025
▶ Reinforcement Learning Reading Group Coordinator (University of Wisconsin-Madison)	2025
▶ Graduate Student Mentor for Wisconsin Science and Computing Emerging Research Stars (WISCERS)	2024, 2025
▶ Graduate Student Mentor for Fall 2025 graduate cohort (University of Wisconsin-Madison)	Fall 2025
▶ Invited Panelist, Demystifying Graduate School (University of Wisconsin-Madison)	2024, 2025
▶ Sandia Machine Learning and Deep Learning (MLDL) Workshop . Designed a new RL competition.	2022
Reviewing	
▶ Reviewer, TMLR	2025
▶ Reviewer, NeurIPS	2023, 2024, 2025
▶ Reviewer, ICML	2024, 2025
▶ Reviewer, ICLR	2024, 2025, 2026
▶ Senior Reviewer, RLC (Reinforcement Learning Conference)	2024, 2025
▶ Program Committee, AAAI	2024, 2025, 2026
▶ Program Committee, AAAI Alignment Track	2026
▶ Reviewer, RA-L (Robotics and Automation Letters)	2024
▶ Reviewer, ICRA	2024

MEDIA

▶ Training a dog and training a robot aren't so different	2023
---	------

TECHNICAL SKILLS

Machine Learning & Data Science: Python ◦ PyTorch ◦ NumPy ◦ Pandas ◦ Matplotlib ◦ Jupyter ◦ Anaconda
Software Engineering: C++ ◦ C ◦ Git ◦ Bash