Adam Labiosa

Curriculum Vitae

Madison, WI — labiosa@wisc.edu — adamlabiosa.github.io — linkedin.com/in/adam-labiosa

SUMMARY

Ph.D. candidate researching how reinforcement learning can enable agents to act effectively despite limited time and compute to reason, with work spanning humanoid robotics, multi-agent coordination, VLAs, and large-scale recommendation systems. Seeking a Research Scientist internship involving RL for real-world decision-making for Summer 2027.

EDUCATION

Ph.D. Computer Science 09/22 – 05/28
University of Wisconsin-Madison
Department of Computer Science

- Advisor: Josiah Hanna
- Research focus: Reinforcement learning, robotics

B.S. Electrical Engineering and Computer Science 09/19 – 05/22
University of Wisconsin-Madison
College of Engineering

- Overall GPA: 3.94
- Graduated with Distinction

EXPERIENCE

Graduate Research Assistant 05/22 – 05/28
University of Wisconsin-Madison
Madison, WI
Advisor: Josiah Hanna
Current Research:

- Designing RL-based meta-reasoning algorithms that enable agents to act with delayed planning in real-time, dynamic domains
- Authoring a survey on adaptive computation across AI and cognitive science in collaboration with researchers at the University of Alberta
- Developing RL methods for multi-agent coordination and full-body agile locomotion on humanoid robots competing in RoboCup
- Building autonomous robotic systems for invasive species control in waterways as part of an NSF NRT INTEGRATE fellowship

Applied Science Intern 09/25 – 12/25
Amazon
New York City, NY
Research:

- Built a transformer-based offline RL approach for recommendation systems trained on a large-scale user dataset
- Achieved meaningful performance improvement in attribution metrics over production baselines

Undergraduate Research Assistant 11/20 – 05/22
University of Wisconsin-Madison
Madison, WI
Advisor: Karu Sankaralingam
Research:

- Worked with PhD students to design custom hardware accelerators for machine learning

Software Developer Intern 05/21 – 09/21, 05/22 – 09/22
Blue Cross Blue Shield
Eagan, MN

PUBLICATIONS

Labiosa, A.* & Hanna, J. (RLC 2026). *When to Plan: Learning to Select Between Reactive Control and Deliberative Planning*

Labiosa, A.*, Wang, Z*., Agarwal, S., Cong, W., Hemkumar, G., Harish, A. N., Hong, B., Kelle, J., Li, C., Li, Y., Shao, Z., Stone, P.†, & Hanna, J.†. (ICRA 2025). *Reinforcement Learning Within the Classical Robotics Stack: A Case Study in Robot Soccer*

Labiosa, A.* & Hanna, J. (ICRA 2025). *Multi-Robot Collaboration through Reinforcement Learning and Abstract Simulation*

Corrado, N.*, Qu, Y., Balis, J. U., **Labiosa, A.**, & Hanna, J. (RLC 2024). *Guided Data Augmentation for Offline Reinforcement Learning and Imitation Learning*

WORKSHOPS AND INTERNAL PROCEEDINGS

Labiosa, A.* & Hanna, J. (RL in Big Worlds Workshop RLC 2026) *Learning to Act While Thinking*

Labiosa, A.*, Kimmel, Y., Korkut, M. (Submitted to Amazon Machine Learning Conference AMLC 2026). *Return Estimation with Transformers for Multi-Touch Attribution*

Labiosa, A.*, Wang, Z.*, Agarwal, S., Cong, W., Hemkumar, G., Harish, A. N., Hong, B., Kelle, J., Li, C., Li, Y., Shao, Z., Stone, P.†, & Hanna, J.†. (Workshop on Athletic Robots and Dynamic Motor Skills ICRA 2025). *Reinforcement Learning Within the Classical Robotics Stack: A Case Study in Robot Soccer*

- Award: Best RoboCup Themed Paper

AWARDS AND HONORS

NSF NRT Fellowship 2025

- Provides two years of funding for research.

3rd Place RoboCup Standard Platform League Champions Cup 2025

1st Place RoboCup Standard Platform League Challenge Shield 2024

University of Wisconsin-Madison Computer Science Research Scholarship 2023

3rd Place RoboCup Standard Platform League Challenge Shield 2023

Claude and Dora Richardson Engineering Scholarship 2022

Koch Family Foundation Scholarship 2019

TEACHING EXPERIENCE

Advanced Machine Learning - Teaching Assistant University of Wisconsin-Madison

- Lectured on reinforcement learning and AI ethics

Introduction to Artificial Intelligence - Teaching Assistant University of Wisconsin-Madison

Introduction to Computer Architecture - Teaching Assistant University of Wisconsin-Madison

Introduction to Computer Engineering - Teaching Assistant University of Wisconsin-Madison

SERVICE

RoboCup Humanoid Soccer League 2026 – Organizing Committee
NeurIPS 2026, 2025, 2024 – Reviewer
ICLR 2026, 2025 – Notable Reviewer 2026, 2025
RLC 2026, 2025 – Reviewer
ICRA 2025, 2024 – Reviewer
AISTATS 2026, 2025 – Reviewer
CogMI 2025 – Reviewer

NLDL 2026 – Reviewer
IROS 2026 – Reviewer
Robocup Symposium 2026, 2025, 2024 – Reviewer

SKILLS

Reinforcement learning, Robotics, Transformers, Python, C++, Pytorch, Jax, MuJoCo, MJX, Brax, Ros2, AWS, Hydra, Docker, HTCondor HPC