Adam Lee

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EDUCATION

Harvard University   Cambridge, Massachusetts
Ph.D. Candidate in Computer Science, Advisor: Cengiz Pehlevan   2023 – Present
NSF GRFP Fellow

University of California, San Diego   La Jolla, California
B.S. in Data Science, B.S. in Applied Mathematics   2019–2023

RESEARCH EXPERIENCE

Salk Institute for Biological Studies   **Talmo Pereira** | December 2021 – June 2023
  – Development of a biologically inspired simulation to study biomechanical constrained behavior among animals using MuJoCo and deep reinforcement learning.

Universität Bielefeld   **Kevin Tierney** | June 2022 – September 2022
  – Applying autoregressive deep reinforcement learning to mixed integer combinatorial optimization problems on a HPC cluster.

Oregon State University – REU   **Cindy Grimm** | June 2021 – September 2021
  – Development of simulator to reality transfer to perform deep reinforcement learning on real-world robotics in grasping

Arthur C. Clarke Center for Human Imagination – REU   **Robert Twomey, Jon Paden** | Sep 2020–Sep 2021
  – Created and trained multiple deep generative models in audio, text and image modalities. Deployed models to computing cluster with interactive web interfaces.

Pacific Research Platform – REU   **Jon Paden, Tom DeFanti** | June 2020 – December 2020
  – Built a platform for interactive server maintenance in VR with real-time traceroute visualiations.

INDUSTRY

Surfn   Co-founder, May 2020 – June 2021
  – A social video call real-time matching platform created to create connections between college students, deployed to app store with 200+ users
  – Designed and developed full-stack software system for video chatting and real-time matchmaking – backend, databases, frontend, devops
  – Recruited and led a team of **12** people in order to coordinate design, engineering, and marketing strategies

Accel Robotics   R&D Intern, Jan 2021 – June 2021
  – A platform creating frictionless shopping experiences through automated grocery and convenience stores
  – Developed analyses and visualizations of real-world shopper data to consult creation of a new store location
  – Developed a recommender system from scratch on shopper preferences. Includes: Training pipeline with live data, algorithm selection tools with metrics, API, and real-world deployment tooling.

Education.com   Software Engineer Intern, July 2019 – Sept 2019
  – An educational platform providing teachers and parents with learning resources

– Built site-wide recommendation system for educational content. Scraped and preprocessed data from **1+ million children** utilizing REST APIs. Built and tuned various deep learning model architectures in Tensorflow.

– Wrote a script utilizing PHP to make content images SEO-friendly sitewide to increase site access from Facebook and Twitter for **30k+** pieces of educational content.

Teaching

• **Imitating Behavior to Model the Brain**, University of California, San Diego　　　　Fall 2022, Winter 2023
Developed a two-quarter senior-level course with Talmo Pereira covering the domain of NeuroAI within motion capture, reinforcement learning, and imitation learning with the goal of preparing students for research - Created a week-by-week plan with curated readings, engaging questions, and coding assignments.

Publications, Posters, Presentations

1. Eric Leonardis, Dan Butler, **Adam Lee**, Scott Yang, Diego Aldarondo, Bence Ölveczky, Eiman Azim, Talmo Pereira, "The impact of biomechanical actuators on neural embodied control", *COSYNE, 2024*

2. **Adam Lee**, Talmo Pereira, Kay Tye, "Refining Neuroethological Simulation with Machine Learning" (poster), *UCSD Undergraduate Research Symposium, 2022*

Scholarships and Awards

• National Science Foundation Graduate Research Fellowship　　　　2023–present
• Halıcıoğlu Data Science Institute Undergraduate Scholarship　　　　2020, 2022
• Triton Research & Experiential Learning Scholars Award　　　　2021