

Eylam Tagor

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EDUCATION

Columbia University

M.S. in Computer Science, GPA: 3.81

New York, NY
Exp Dec 2025

- Advisor: Elias Bareinboim

- Relevant Courses: Causal Inference, Natural Language Processing, LLMs, Advanced Deep Learning, Databases

- Teaching: Reinforcement Learning (Fall 2025), Causal Inference for Data Science (Spring 2025)

The University of Texas at Austin

B.S. in Computer Science, GPA: 3.93

Austin, TX
May 2024

- Relevant Courses: Artificial Intelligence, Machine Learning Theory, Neural Networks, Algorithms & Complexity

SKILLS

Languages: Python, C/C++/C#, R, Java, Swift, JavaScript, MATLAB, HTML5/CSS, SQL, Bash/Shell scripting

Tools & Frameworks: PostgreSQL, PyTorch, Pandas, Scikit-learn, Anaconda, NumPy, ROS, version control systems, Git, GitHub, GitLab, Docker, Kubernetes, Firebase, AWS, Linux/Unix, TensorFlow, QEMU, Spark, Hadoop, GCP

RESEARCH/PUBLICATIONS

Tagor, E., Li, M., & Bareinboim, E. (2025). CILBench: Benchmarking Robust Imitation Learning in Confounded High-Dimensional Control Environments. Preprint, under submission. Columbia University.

- Developed imitation learning algorithms that utilize causal inference theory for behavioral cloning and inverse RL.
- Parameterized classic RL environments as SCMs with latent confounders and partial observability.
- Introduced a novel benchmark for imitation learning measuring robustness in complex embodied tasks.
- Demonstrated that causal algorithms successfully reach expert performance while state-of-the-art algorithms fail.

NVIDIA AI Research Collaboration (Embodied RL)

- Devised embodied agent and training environment using OpenAI Gym using multimodal input to play diverse games.
- Worked in a group led by Dr. Jim Fan and Dr. Anima Anandkumar leveraging modern RL algorithms, LLMs, and large-scale pre-training from internet data to improve agent decision-making and performance across varied tasks.

Residual Neural Causal Model for STEM Academic Performance (Causal DL)

- Proposed ResNCM, a novel Neural Causal Model using Python, PyTorch, Causal-Learn and DoWhy.
- Performed counterfactual analysis on exam scores (30K samples) and personalized learning data (10K samples).
- Outperformed classical and DL baselines and revealed insights such as a direct causal effect of gender on math scores.

PROFESSIONAL EXPERIENCE

Sandia National Laboratories

Software R&D Intern

Albuquerque, NM

Jun 2025 – Aug 2025; May 2023 – Aug 2023

- Engineered an unsupervised ML pipeline for detecting performance anomalies in production HPC systems.
- Designed a machine learning model to classify satellite footage using deep computer vision.
- Created data flow algorithms using Hadoop and Spark to manage migration and querying of volatile 10 TB dataset.

Learning Agents Research Group at UT Austin

Austin, TX

Research Assistant

Jan 2024 – May 2024

- Implemented multi-agent deep RL algorithms for humanoid robots to play 5-on-5 soccer.
- Developed a simulation environment to train policies for various behaviors: passing, kicking, diving, etc.
- Won 1st place in the 2024 RoboCup Standard Platform League's Challenge Shield Division, led by Dr. Peter Stone.

Big Data in Biology Lab at UT Austin

Austin, TX

Research Assistant

Jan 2022 – Dec 2022

- Developed dimensionality reduction and clustering algorithms to identify genes responsible for cancer aggressiveness.
- Experimented with ML & data science methods to predict relevant gene pathways given RNA sequencing data.
- Discovered novel pathways strongly correlated with persister melanoma, leading to further research on treatments.

Unlimited Robotics

Tel Aviv, Israel

Software Engineer Intern

Jun 2022 – Aug 2022

- Built a generalist robotic agent to assist humans in hospital and hotel tasks based on ROS and Python.
- Designed an adaptive pathfinding algorithm using LiDAR and multiple cameras and learning in real-time.
- Equipped agent with fine-tuned object recognition model enabling live tracking and physical interaction with targets.
- Assembled virtual simulation environment to train and test agent behaviors using Unity.