

THOMAS KAMINSKY

1111 Fern Ave, Walla Walla, WA 99362

📞 REDACTED

✉ tkaminsky@g.harvard.edu

🌐 [linkedin.com/in/thomas-kaminsky](https://www.linkedin.com/in/thomas-kaminsky)

🐙 github.com/tkaminsky

EDUCATION

Harvard University

Cambridge, MA

PhD in Computer Science (Ongoing).

Sep. 2024 – Present

Advisor: [Stephanie Gil](#); Assistant Professor of Computer Science.

A.B. in Statistics and Mathematics, *magna cum laude*.

Sep. 2020 – May 2024

Secondary in Computer Science. **GPA: 3.945/4.0**

RELEVANT COURSEWORK

- Machine Learning
- Stochastic Processes
- Real Analysis
- Systems Programming
- Reinforcement Learning
- Statistical Inference
- Differential Geometry
- Digital Fabrication

RESEARCH EXPERIENCE

Department of Statistics, Harvard University

Cambridge, MA

Senior Thesis [[Link](#)]

Aug. 2023 – Apr. 2024

Advisor: [Gabriel Kreiman](#), Professor of Ophthalmology, Harvard Medical School.

- Completed a capstone thesis concerning curriculum learning methods in sparse robotic grasping tasks.
- Recommended for High Honors by a committee of Harvard Professors in the statistics and mathematics departments.
- Implemented autot curriculum methods in Python using PyTorch and developed visualizations for evaluating success.

Amazon ScienceHub, University of Washington

Seattle, WA

REU Student in Computer Vision and Robotics

Summer 2022, 2023 [10 Weeks]

- Coordinated with members of UW, NVIDIA, and Amazon Robotics to implement a pipeline for reasoning over bin scenes for online grasping of unknown objects using a robotic arm. Trained and refined models for segmenting unknown objects in bin scenes, generated synthetic data, and applied computer vision techniques to track objects over time.

Robotics: Perception and Manipulation Lab, University of Minnesota

Minneapolis, MN

Research Intern in Robotics

Feb. – June 2023

- Worked with Professor Karthik Desingh on pose estimation and manipulation problems for objects with symmetries.
- Used Blender to create a synthetic dataset and implemented energy-based models to learn orientation distributions.

TEACHING EXPERIENCE

Euler Circle

Mountain View, CA

Mathematics Teaching Assistant (Remote)

June – August 2024

- Assisted in teaching a group of high school students in cryptography and independent project courses.
- Met with students to learn number theory, probability, and algorithms concepts required for elliptic curve cryptography.

Harvard University

Cambridge, MA

Course Assistant in Mathematics, Statistics, and Computer Science

Jan. 2021 – May 2024

- Graded problem sets, ran sections and office hours, and tutored students in courses in Linear Algebra, Multivariable Calculus, Reinforcement Learning, and Proofwriting.

PROJECTS

Ther-E-Man [[Link](#)]

May 2024

- Made a theremin that plays sound and controls a custom web game using the hand's proximity to an antenna.
- Designed CAD models of the casing using Fusion 360, and printed parts using a laser cutter. Communicated with a HTML website using an ESP-32 web server, and designed the game using JavaScript and Phaser 3.

Active Inverse Reinforcement Learning for Context-Conditioned MDPs [[Link](#)]

November 2023

- Developed a framework for actively gathering expert data for learning multi-task IRL policies in a multi-goal maze task.
- Implemented models for behavior cloning and network-based IRL, and evaluated our results using AL heuristics.

TECHNICAL SKILLS

Languages: Python, Java, C, C++, HTML/CSS, JavaScript, SQL.

Technologies/Frameworks: Linux, GitHub, ROS, Pytorch, Wandb, PyBullet, Gym, AWS, SLURM.

Fabrication: Fusion 360, Blender, Laser Cutting, 3D Printing, CNC Milling, Microcontroller Programming.