

Education

University of Maryland, College Park

Ph.D. candidate in Computer Science

College Park, MD

2019–Present

- *Advised by:* John P. Dickerson and Aravind Srinivasan
- *Research areas:* sequential and combinatorial decision-making under uncertainty (multi-armed bandits, multi-agent reinforcement learning); algorithmic fairness; mathematical modeling

University of Maryland, College Park

M.S. in Computer Science; specialization in Artificial Intelligence

College Park, MD

2019–2021

- *Selected coursework:* Algorithms in Machine Learning: Guarantees and Analyses, Applied Mechanism Design, Advanced Numerical Optimization, Scientific Computing
- *GPA:* 3.94

University of California, Los Angeles (UCLA)

B.S. in Applied Mathematics; specialization in Computing

Los Angeles, CA

2016–2019

- *GPA:* 3.87

Experience

Oracle Inc.

Data Science Intern, Retail team

Remote

06/2022–08/2022

Advised by: Debdatta Sinha Roy and Sajith Vijayan | Streaming algorithm development for retail forecasts.

Harvard University

Center for Research on Computation and Society (CRCS) Summer Fellow

Remote

06/2020–08/2020

Advised by: Milind Tambe and Rediet Abebe | Algorithmic fairness in restless multi-armed bandits.

Google LA & Institute for Pure and Applied Math (IPAM), UCLA

Research in Industrial Projects for Students (RIPS) Fellow

Los Angeles, CA

06/2019–08/2019

Advised by: Vardan Akopian and Scott Schneider | Probabilistic privacy assurance in Google's Ads Data Hub.

UCLA

Student Researcher

Los Angeles, CA

03/2018–06/2019

Advised by: Andrea L. Bertozzi | Reinforcement learning of dynamical systems for a municipal gang prevention program.

UCLA

Student Researcher

Los Angeles, CA

03/2018–03/2019

Advised by: Mason A. Porter | Quantitative analysis of an ensemble of large networks, with $\sim 10^3$ nodes and $\sim 10^5$ edges.

UCLA

Student Researcher

Los Angeles, CA

06/2016–08/2017

Advised by: Andrea L. Bertozzi | Numerical solutions to partial differential equations describing particle-laden flows.

Conference and Journal Papers

- [1] C. Herlihy*, **A. Prins***, A. Srinivasan, and J. Dickerson, “Planning to Fairly Allocate: Probabilistic Fairness in the Restless Bandit Setting”, in *ACM SIGKDD Conference on Knowledge Discovery and Data Mining*, (to appear), 2023. Available: <https://arxiv.org/abs/2106.07677>.
- [2] D. Dominic*, J. Bojorquez*, J. Crasto*, M. Koulikova*, T. Latib*, **A. Prins***, A. Shapiro*, C. Ye*, D. Arnold, C. Falcon, and A. Bertozzi, “Investigation of Constant Volume and Constant Flux Initial Conditions on Bidensity Particle-Laden Slurries on an Incline”, *American Journal of Undergraduate Research* 16.3: 42-57, 2019.

Workshop Papers and Extended Abstracts

- [1] C. Herlihy*, **A. Prins***, A. Srinivasan, and J. Dickerson, *Planning to Fairly Allocate: Probabilistic Fairness in the Restless Bandit Setting*, Responsible Decision Making in Dynamic Environments Workshop, ICML, 2022.

- [2] **A. Prins**, C. Herlihy, and J. Dickerson, *What Should I Grow Today so I Make Money Tomorrow? Supporting Small Farmers' Crop Planning with Social, Environmental, and Market Data*, Practical ML for Developing Countries Workshop, ICLR, 2022.
- [3] **A. Prins**, A. Mate, J. Killian, R. Abebe, and M. Tambe, *Incorporating Healthcare Motivated Constraints in Restless Bandit Based Resource Allocation*, Challenges of Real World Reinforcement Learning, Machine Learning in Public Health (Best Lightning Paper), Machine Learning for Health (Best on Theme), Machine Learning for the Developing World, NeurIPS, 2020.
- [4] J. Bojorquez*, A. Busis*, **A. Prins***, A. Shapiro*, Q. Zhu*, X. Zuo*, C. Falcon, and A. Bertozzi, *Experimental and Theoretical Investigation of Constant Flux Bidensity Particle Laden Flows on an Incline*, APS March Meeting Abstracts, 2018.

Technical Skills

Proficient: Python, SQL, MATLAB, \LaTeX | **Familiar:** R, C++

Libraries & tools: scikit-learn, pandas, NumPy, Scipy, NetworkX, Gurobi

Teaching Experience

University of Maryland, College Park

Teaching Assistant

College Park, MD

06/2019–05/2020

- Introduction to Data Science (CMSC 320), Fall 2019 and Fall 2020
- Introduction to Artificial Intelligence (CMSC 421), Spring 2020

Service

PC member	AI for Social Good workshop (held at AAAI)	2023
	Equity and Access in Algorithms, Mechanisms, and Optimization (EAAMO)	2022
Reviewer	Conference on Neural Information Processing Systems (NeurIPS)	2022–2023
	International Conference on Machine Learning (ICML)	2022
	Artificial Intelligence and Statistics (AISTATS)	2021
	Machine Learning for Health Symposium (ML4H)	2021–2022
	Cooperative AI NeurIPS Workshop	2020
Co-organizer	Multi-agent Reinforcement Learning Reading Group	2023
	Pasteur's Quadrant Seminar Series	2021–2022
Board member	Graduate Student Seating Committee	
	Director of UMIACS Review Committee	