

EDUCATION

Carnegie Mellon University

PhD Machine Learning

Advisor: Fei Fang

Pittsburgh, PA

August 2023 -

University of Cambridge

MPhil Advanced Computer Science

Graduated with Distinction

Cambridge, England

October 2022 - June 2023

University of Maryland

Bachelor of Science - Computer Science and Math, High Honors

GPA: 3.97, Magna Cum Laude

College Park, MD

August 2018 - May 2022

PUBLICATIONS

Full Papers

Assortment Optimization for Matching Patients and Providers

ML4H Findings 2024

Naveen Raman, Holly Wiberg

Global Rewards in Restless Multi-Armed Bandits

NeurIPs 2024

Naveen Raman, Ryan Shi, Fei Fang

Understanding Inter-Concept Relationships in Concept-Based Models

ICML 2024

Naveen Raman, Mateo Espinosa Zarlenga, Mateja Jamnik

Human Uncertainty in Concept-Based AI Systems

AIES 2023

Katherine M Collins, Matthew Barker, Mateo Espinosa Zarlenga, Naveen Raman, Umang Bhatt, Mateja Jamnik, Ilija Sucholutsky, Adrian Weller, Krishnamurthy Dvijotham

Data-Driven Methods for Balancing Fairness and Efficiency in Ride-Pooling

IJCAI 2021

Naveen Raman, Sanket Shah, John Dickerson

Stress and burnout in open source: Toward finding, understanding, and mitigating unhealthy interactions

ICSE NIER 2020

Naveen Raman, Minxuan Cao, Yulia Tsvetkov, Christian Kästner, Bogdan Vasilescu

A Muffin-Theorem Generator

FUN 2018

Guangqi Cui*, John Dickerson*, Naveen Durvasula*, William Gasarch*, Erik Metz*, Jacob Prinz*, Naveen Raman*, Daniel Smolyak*, Sung Hyun Yoo*

Workshop Papers

Do Concept Bottleneck Models Obey Locality?

Workshop on the Future of XAI at NeurIPs 2023

Naveen Raman, Mateo Espinosa, Juyeon Heo, Mateja Jamnik

Improving Learning-to-Defer Algorithms Through Fine-Tuning

Workshop on Human and Machine Decisions (WHMD) at NeurIPS 2021

Naveen Raman, Michael Yee

Eliciting Bias in Question Answering Models through Ambiguity

Machine Reading for Question Answering (MRQA) at EMNLP 2021

Andrew Mao*, Naveen Raman*, Matthew Shu, Eric Li, Franklin Yang, Jordan Boyd-Graber

What more can Entity Linking do for Question Answering?

Human And Machine in-the-Loop Evaluation and Learning Strategies (HAMLETS) at NeurIPS 2020

Naveen Raman, Pedro Rodriguez, Jordan Boyd-Graber

Under Review

PeerCoPilot: A Language Model-Powered Assistant for Behavioral Health Organizations
Gao Mo*, **Naveen Raman***, Megan Chai, Cindy Peng, Shannon Pagdon, Nev Jones, Hong Shen, Peggy Swarbrick, and Fei Fang

Large Language Models in Peer-Run Community Behavioral Health Services: Understanding Peer Specialists and Service Users' Perspectives on Opportunities, Risks, and Mitigation Strategies

Megan Chai*, Cindy Peng*, Gao Mo, **Naveen Raman**, Shannon Pagdon, Fei Fang, Nev Jones, Peggy Swarbrick, and Hong Shen

Contextual Budget Allocation for Food Rescue Volunteer Engagement

Ariana Tang, **Naveen Raman**, Fei Fang, and Ryan Shi

An Extended Study on Restless Multi-Armed Bandits with Global Rewards

Naveen Raman, Ryan Shi, Sean Hudson, Ameesh Kapoor, and Fei Fang

Data-driven Design of Randomized Control Trials with Guaranteed Treatment Effects

Santiago Cortes-Gomez, **Naveen Raman**, Aarti Singh, Bryan Wilder

PROFESSIONAL SERVICE

Conference Reviewing

Reviewing: NeurIPS (2022,2023, Top Reviewer 2024), AAAI (2025), ICML (2024), AAMAS (2024), COLING (2022), AISTATS (2025)

Organizing

MLC Nigeria *Volunter Assistant*

October 2023 - Present

Machine Learning for Health *Roundtable Chair*

December 2024

Department Service

Machine Learning Department *Masters Admissions Committee*

November 2024 - Present

Machine Learning Blog *Blog Editor*

August 2024 - Present

Machine Learning Department *Social Committee*

October 2023 - May 2024

Mentorship

School of Computer Science *Graduate Application Support Program*

October 2023 - Present

School of Computer Science *Tech Nights*

October 2023 - December 2023

School of Computer Science *AI Mentorship Program*

October 2023 - December 2023

Student Community Action *Big Sibling*

October 2022- May 2023

Maryland Mentors Program *Math and Reading Tutor*

September 2020-May 2022

College Park Academy *Academic Volunteer*

September 2018-May 2021

College Mentors for Kids *Mentor*

January 2021 - May 2021

TALKS

Global Rewards in Restless Multi-Armed Bandits

Food Rescue Conference

University of Maryland Multi-Agent RL Group

Carnegie Mellon Econ-CS Reading Group

Multi-Agent Learning Seminar

EAAMO Urban Data Science Working Group

Inter-Concept Learning Relationships

Gordon Conference on Cancer Genetics

EXPERIENCE

Amazon

Research Intern

Palo Alto, CA

Summer 2025

World Resource Institute

Research Intern

Washington DC

Spring 2022

MIT Lincoln Labs

Research Intern

Lexington, MA

Summer 2021

Facebook
Software Engineering Intern

Menlo Park, CA
Summer 2020

REUSE @ Carnegie Mellon
Research Intern

Pittsburgh, PA
Summer 2019

HONORS AND AWARDS

NeurIPS Top Reviewer	2024
ICML Travel Grant (declined)	2024
University of Maryland Undergraduate Researcher of the Year	2022
National Science Foundation Graduate Reserach Fellowship (GFRP)	2022
Churchill Scholarship (fully funded Cambridge MPhil)	2022
CRA Undergraduate Researcher of the Year Finalist	2021
Phillip Merrill Presidential Scholar	2021
Barry Goldwater Scholarship	2021
Brendan Iribe Scholarship (full tuition scholarship)	2020
President's Scholarship (4-year scholarship)	2018

TEACHING

Teaching Assistant: Programming Languages, University of Maryland
Taught Ruby, Rust, and Functional Programming to UMD undergraduates (Fall 2019-Spring 2022)

Head Course Facilitator: Algorithms for Interviews, University of Maryland
Developed and taught student-run class on algorithms for coding interviews (Spring 2020-Spring 2022)

Teaching Assistant: Web Development, University of Maryland
Taught HTML and Javascript to non-CS major students at UMD (Spring 2019)