

Naveen Raman

<https://naveenraman.com>

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EDUCATION

Carnegie Mellon University
PhD Machine Learning

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

Human Uncertainty in Concept-Based AI Systems

Artificial Intelligence, Ethics, and Society (AIES) 2023

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

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

International Joint Conference on Artificial Intelligence (IJCAI) 2021

Naveen Raman, Sanket Shah, John Dickerson

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

International Conference on Software Engineering New Ideas and Emerging Results (ICSE NIER) 2020

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

A Muffin-Theorem Generator

Fun with Algorithms (FUN) 2018

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

Workshop Papers

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

PROFESSIONAL SERVICE

Student Community Action *Big Sibling*

October 2022- May 2023

Matched up and met weekly with local elementary school students in Cambridge

Maryland Mentors Program *Math and Reading Tutor*

September 2020-May 2022

Tutored elementary school students one-on-one in reading and math

College Park Academy *Academic Volunteer*

September 2018-May 2021

Assisted with various after school programs at local charter school, including cybersecurity, homework help, and college application assistance

College Mentors for Kids *Mentor*

January 2021 - May 2021

Met weekly with middle school students to provide advice and tutoring

Reviewing: NeurIPS (2022,2023), COLING 2022

HONORS AND AWARDS

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)

EXPERIENCE

University of Maryland <i>Research Assistant</i>	May 2018-May 2022
<ul style="list-style-type: none">◦ Developed matching algorithms for rideshare applications that balanced fairness and profit◦ Collected and analyzed data for entity linking algorithms to improve question answering performance	
MIT Lincoln Labs <i>Research Intern</i>	May 2021-August 2021
<ul style="list-style-type: none">◦ Extended learning-to-defer algorithms for heterogeneous experts using semi-supervised learning	
World Resource Institute <i>Electric School Bus Intern</i>	February 2022-May 2022
<ul style="list-style-type: none">◦ Analyzed and collected data on school bus depot locations through web scraping and data science techniques, making it clearer how to transition from gas to electric school busses	
Facebook <i>Software Engineering Intern</i>	May 2020-August 2020
<ul style="list-style-type: none">◦ Developed full stack web application using React+Hack to debug issues with ranking models, and shipped code into production after rounds of UI testing	
Carnegie Mellon University <i>Research Intern</i>	May 2020-August 2020
<ul style="list-style-type: none">◦ Investigated toxic and rude language in Github communities by developing a toxicity detector which was used to analyze trends across communities and timespans	