

# Aishwarya Mandyam

<https://aishwaryamandyam.com/>

am2@stanford.edu

Stanford University  
353 Serra Mall,  
Stanford, CA 94305

## Education

- 2022- **Ph.D., Computer Science**  
Stanford University, Stanford, CA  
Advisors: Barbara E. Engelhardt, Emma Brunskill
- 2020-2022 **Ph.D., Computer Science**  
Princeton University, Princeton, NJ  
Advisor: Barbara E. Engelhardt (left program)
- 2019-2020 **MS, Computer Science**  
University of Washington, Seattle, WA  
Advisors: Luis Ceze, Jeff Nivala, Kevin Jamieson
- 2015-2019 **B.S., Computer Science**  
**B.A., Philosophy**  
University of Washington, Seattle, WA  
Advisors: Luis Ceze, Jeff Nivala

## Awards & Fellowships

- 2024 **Stanford Data Science Scholars Fellowship**  
Awarded to a select group of current Stanford PhD students who contribute to data-intensive science (\$60,000).
- 2023 **Best Proceedings Paper Runner-Up, Machine Learning for Healthcare Symposium**
- 2022 **Stanford School of Engineering Fellowship**  
Awarded a 1-year fellowship to cover rotations (\$60,000).
- 2019 **ACM Student Research Competition Award**  
2nd place in the undergraduate research category.
- 2019 **Class of 2019 Allen School Undergraduate Service Award**  
The Allen School service award recognizes 2 students in every graduating class for outstanding service contributions to the Allen School.
- 2018 **Husky 100**  
The Husky 100 recognizes 100 out of 40,000 UW undergraduate and graduate students who are making the most of their time at the UW.

## Publications

(\*) symbol denotes equal contribution as co-first or co-senior author.

### PREPRINTS & WORKING PAPERS

- [S1] **Aishwarya Mandyam**, Shengpu Tang, Jiayu Yao, Jenna Wiens, Barbara E. Engelhardt. “CAN-DOR: Counterfactual ANnotated DOubly Robust Off-Policy Evaluation”.

### JOURNAL ARTICLES

- [J1] **Aishwarya Mandyam**, Didong Li, Diana Cai, Andrew Jones, Barbara E. Engelhardt. “Kernel Density Bayesian Inverse Reinforcement Learning”. In: *Transactions of Machine Learning Research*. [\[PDF\]](#)
- [J2] Niranjani Prasad\*, **Aishwarya Mandyam\***, Corey Chivers, Michael Draugelis, C. William Hanson III, Barbara E. Engelhardt. “Guiding Efficient, Effective, and Patient-Oriented Electrolyte Replacement in Critical Care: An Artificial Intelligence Reinforcement Learning Approach”. In: *Journal of Personalized Medicine*. [\[PDF\]](#)
- [J3] Katie Doroschak, Karen Zhang, Melissa Queen, **Aishwarya Mandyam**, Karin Strauss, Jeff Nivala, Luis Ceze. “Porcupine: Rapid and robust tagging of physical objects using nanopore-orthogonal DNA strands”. In: *Nature Communications (2020)*. [\[PDF\]](#)

### CONFERENCE PROCEEDINGS

- [C1] **Aishwarya Mandyam\***, Matthew Joerke\*, Barbara Engelhardt, Emma Brunskill. ‘Adaptive Interventions with User-Defined Goals for Health Behavior Change’. In: *Conference on Health Inference and Learning (CHIL) 2024*. [\[PDF\]](#)
- [C2] **Aishwarya Mandyam**, Andrew Jones, Jiayu Yao, Krzysztof Laudanski, Barbara E. Engelhardt. ‘Compositional Q-learning for electrolyte repletion with imbalanced patient sub-populations’. In: *3rd Machine Learning for Health Symposium (2023)*. [\[PDF\]](#)
- [C3] **Aishwarya Mandyam**, Jeff Soules, Elizabeth Yoo, Krzysztof Laudanski, Barbara E. Engelhardt. ‘COP-E-CAT: Cleaning and Organization Pipeline for EHR Computational and Analytic Tasks’. In: *ACM Conference on Bioinformatics, Computational Biology, and Health Informatics (2021)*. [\[PDF\]](#)

### REFEREED WORKSHOP PAPERS

- [W1] **Aishwarya Mandyam**, Siena Dumas Ang, Barbara E. Engelhardt. “Estimating Influential Samples in the Fragile Families Challenge”. In: *NeurIPS Women in Machine Learning Workshop (2020)*. [\[PDF\]](#)
- [W2] **Aishwarya Mandyam**, Yuhao Wan, Luis Ceze, Jeff Nivala, Kevin Jamieson. “Estimating Influential Samples in the Fragile Families Challenge”. In: *Machine Learning in Computational Biology (MLCB) (2020)*. [\[PDF\]](#)

## Talks & Presentations

- 2024 New York University, Rajesh Ranganath's Group Meeting
- 2024 New York Academy of Science's 15th Machine Learning Symposium
- 2024 Michigan AI symposium
- 2024 Harvard University DtAK Lab Group Meeting
- 2024 University of Michigan MLD3 Group Meeting
- 2020 Machine Learning in Computational Biology (MLCB), Oral Presentation

## Industry Experience

- 2024 AMAZON, *Applied Science Intern*, New York City  
Hosted by Dean Fotster and Omer Gottesman. Defining surrogate models to evaluate large language model-based math tutors.
- 2021 GLADSTONE INSTITUTES, *Research Associate*, San Francisco
- 2019 ALLEN INSTITUTE OF ARTIFICIAL INTELLIGENCE, *Intern*, Seattle  
Implemented and analyzed custom computer vision models to detect veins and arteries in ultrasound videos.
- 2018 SAGE BIONETWORKS, *Intern*, Seattle  
Designed and developed an Android app feature to measure cardiorespiratory fitness to be used in a National Institute of Health study with 1 million users.
- 2018 MICROSOFT, *Intern*, Seattle  
Designed and implemented a Convolutional Neural Network to detect highlight clips from game streams to enable gamers to share the best parts of their gameplay sessions, increasing the visibility of the Xbox gaming environment.
- 2017 MICROSOFT, *Intern*, Seattle  
Built an end-to-end prototype that allows users to control the Xbox using Amazon Alexa and Cortana Assistant. Prototype was expanded to create a shipped feature and covered in The Verge, TechCrunch, IGN, Geekwire.
- 2016 MICROSOFT, *Explorer Intern*, Seattle
- 2015 EXPEDIA, *Software Developer Apprentice*, Seattle

## Teaching & Mentoring

### UNDERGRADUATE MENTEES

William Denton

### TA EXPERIENCE

- 2019 COMPUTER SCIENCE AND ENGINEERING 421, *University of Washington*.  
Undergraduate-level Artificial Intelligence course.

## Professional Service

### JOURNAL & CONFERENCE REVIEWING

Advances in Neural Information Processing Systems (NeurIPS), 2024

Artificial Intelligence and Statistics (AISTATS), 2024

Machine Learning for Healthcare Symposium (ML4H), 2024

Reinforcement Learning Conference (RLC), 2024

Conference on Health Informatics and Learning (CHIL), 2022

### OTHER SERVICE

2024 MACHINE LEARNING FOR HEALTHCARE SYMPOSIUM (ML4H), *Organizer*

2024 STANFORD-BERKELEY WOMEN'S RESEARCH MEETUP FOR WOMEN IN CS AND EE, *Organizer*