# Meredith Stewart

Curriculum Vitae — September 2025

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mds010.github.io

## Education

**University of California, San Diego** 2024 – 2026
M.S. in Computer Science
Thesis: Statistical Approaches to Model Responsiveness
Advisor: Berk Ustun

**Georgia Institute of Technology** 2018 – 2022
B.S. in Computer Science, *Highest Honors* GPA: 3.9/4.0
Advisor: James Rehg
Thesis: Regression Techniques for Predicting Language Development

## Research Interests

**Areas:** Machine Learning, Optimization, Theoretical Computer Science
**Topics:** Algorithmic Fairness, Data Privacy, Governance, Safety

## Awards & Honors

Omicron Delta Kappa (Leadership Honor Society) 2021 – 2022
Pi Delta Phi (French Honors Society) 2022
Thank a Teacher Award 2019

## Papers

1. Statistical Inference for Responsiveness Verification
   Seung Hyun Cheon*, **Meredith Stewart***, Bogdan Kulynych, Tsui-Wei Weng, Berk Ustun
   *In Submission*, 2025
2. Concept Benchmarking
   Seung Hyun Cheon, Shreyas Kadekodi, Ryan Hammond, Julian Skirzynski, **Meredith Stewart**, Berk Ustun
   *In Preparation*, 2025
3. Learning with Responsiveness Guarantees
   **Meredith Stewart**, Tsui-Wei Weng, Berk Ustun
   *In Preparation*, 2025

## Teaching Experience

**Georgia Institute of Technology** Spring 2019
*CS1371: Computing for Engineers*
*Teaching Assistant*

- Planned and conducted lectures on introductory computer science concepts (e.g., recursion, images, loops) in MATLAB
- Wrote homework questions, graded tests, and maintained class infrastructure for a class of 350 undergraduate engineering students

## Leadership & Service

### Academic Service

NeurIPS Workshop for Algorithmic Collective Action 2025

### Leadership

*President*, Data Science at Georgia Tech 2020 – 2021
*External Affairs Director*, Data Science at Georgia Tech 2019 – 2020
*CPC Delegate*, Alpha Omega Epsilon (Georgia Tech) 2020 – 2021

## Software

infeasible-recourse – Re-implement MILP backend in SCIP

## Professional Experience

**Microsoft.** 2022 – 2024
*Software Engineer, Power Capping Team*

- **Designed and implemented online learning** pipeline in C++ to predict per-VM power usage using accessible VM and server utilization information.
- **Analyzed** per-VM power utilization and performance data across the Azure fleet using **Kusto** to facilitate infrastructure improvements.
- Implemented additional power configuration using C++, improving power usage in datacenters by 7%.
- Implemented security event logs using OpenTelemetry

**Microsoft**. Seattle, WA Summer 2021
*Software Engineering Intern, Power Capping Team*
- Designed and implemented an emergency shutdown mechanism in C# to minimize customer-facing impact
- Produced design specs, documentation, and presentation on the goals, process, and future development.

**Rehg Lab** 2019 – 2022
*Undergraduate Research Assistant*
- Analyzed performance of machine learning pipeline to detect eye contact and its application to language outcomes.
- Researched and developed machine learning experiments using Sklearn to determine correlation between children's eye contact and language development, resulting in undergraduate thesis.

**Symbotic** Summer 2020
*Software Engineering Intern, Inventory Allocation Team*
- **Implemented** alarm system for C# microservices to alert users when key services were unhealthy
- **Designed and implemented** algorithm to ensure even inventory distribution across rows/shelves in warehouses.

## Personal

**Languages:** Fluent in English and French
**Software:** Proficient in Python, MATLAB, and C#. Familiar with Java, R, and C++.
**Interests:** Irish Dance, French History, Literature, Tennis, Cooking