# Ronak Mehta

Email: ronakdm@uw.edu GitHub: github.com/ronakdm

Google Scholar

## **EDUCATION**

University of Washington

Seattle, WA

Ph.D. in Statistics (Advisor: Dr. Zaid Harchaoui)

Fall 2020-Spring 2025 (Expected)

Coursework: Generative Models, Reinforcement Learning, Natural Language Processing, Convex Optimization, Measure Theory, Advanced Theory of Statistical Inference, Advanced Probability

Johns Hopkins University

Baltimore, MD

M.S.E. in Applied Mathematics & Statistics (Advisor: Dr. Joshua Vogelstein)

Fall 2018-Spring 2019

Thesis: "Independence Testing for Multivariate Time Series"

Coursework: Nonlinear Optimization, Matrix Analysis, Bayesian Statistics

Johns Hopkins University

Baltimore, MD

B.S. in Applied Mathematics & Statistics

Fall 2015–Spring 2018

Coursework: Time Series Analysis, Intermediate Programming (C/C++), Data Structures (Java), Algorithms

## EXPERIENCE

D.E. Shaw & Co.

New York, NY

Quantitative Analyst Intern in Futures

Summer 2023

Large language model training.

Amazon

Menlo Park, CA

Research Scientist Intern in Supple Chain Optimization Technology

Summer 2022

Deep sequence models and graph neural networks for multivariate time series forecasting.

Facebook (now Meta)

Menlo Park, CA

Applied Research Science Intern in Enterprise Products

Summer 2021

Multimodal machine learning, interpretable AI.

Microsoft Research

Redmond, WA

Research Intern in Special Projects

Summer 2020

Representation learning, continual/lifelong learning.

Johns Hopkins University Department of Biomedical Engineering

Baltimore, MD

Assistant Research Engineer in NeuroData Laboratory

Fall 2017–Spring 2020

Nonparametric methods, uncertainty estimation, continual/lifelong learning.

Goldman Sachs

New York, NY

Software Engineering Intern in Finance & Risk Technology

Summer 2018

Large-scale data streaming, time series analysis, user-driven design.

Johns Hopkins University Applied Physics Laboratory

Research Intern in Large-Scale Analytics Systems

Laurel, MD Summer 2017

Sentiment analysis, network science, distributed computing in Spark.

### **PUBLICATIONS**

- [1] A. Li, R. Perry, C. Huynh, T. M. Tomita, **R. Mehta**, J. Arroyo, J. Patsolic, B. Falk, S. Sarma, and J. Vogelstein, "Manifold Oblique Random Forests: Towards Closing the Gap on Convolutional Deep Networks", SIAM Journal on Mathematics of Data Science, vol. 5, 2023.
- [2] R. Mehta, V. Roulet, K. Pillutla, L. Liu, and Z. Harchaoui, "Stochastic Optimization for Spectral Risk Measures", in *AISTATS*, vol. 206, PMLR, 2023.

## TALKS

#### Stochastic Ordered Empirical Risk Minimization

Washington, D.C.

Joint Statistical Meetings (JSM), August 2022.

#### Stochastic Optimization for Spectral Risk Measures

Seattle, WA

SIAM Conference on Optimization (OP23), June 2022.

## SCHOLARSHIPS AND AWARDS

#### JSM Student Paper Award in Risk Analysis Honorable Mention

2023

For exceptional student papers regarding theoretical development or applications of risk analysis, including environmental risk, financial risk, the risk to engineering structures, health risks, risks to defense and national security. Presented at Joint Statistical Meetings (JSM) 2023.

#### Institute for Foundations of Data Science (IFDS) Scholarship

2022

To promote fundamental research in the mathematical foundations of data science. Supported by the NSF Transdisciplinary Research in Principles of Data Science (TRIPODS) program.

#### TEACHING

#### University of Washington

Teaching	Assistant -	Graduate	Courses

Winter 2023
Winter 2022
Spring 2021
Winter 2021

#### T. 1 ... M. 1: T. ... (CODAD 410. / /

Introduction to Machine Learning (STAT 416 / CSE 416)

Statistical Methods in Engineering & Science (STAT 390)

Fall 2020

## John Hopkins University

## Instructor of Record

Wathematical Infiking and I foor-writing for Engineers (Etv. 555.105)	Mathematical Thinking and Proof-Writing for Engineers	s (EN.553.109)	Winter 2020
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#### Teaching Assistant - Graduate Courses

Matrix Analysis & Linear Algebra (EN.553.792) Fall 2019

### Teaching Assistant - Undergraduate Courses

Probability & Statistics for the Biological Sciences & Engineering (EN.553.311)

Probability & Statistics for the Physical Sciences & Engineering (EN.553.310)

Fall 2018

Computational Molecular Medicine (EN.553.450)

Spring 2018