Miheer Dewaskar

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Education

University of North Carolina at Chapel Hill

May 2021

Chapel Hill, North Carolina; United States. **Ph.D.** Statistics and Operations research

Title: High-dimensional problems in statistics and probability:

correlation mining and distributed load balancing

Advisors: Shankar Bhamidi, Amarjit Budhiraja, Andrew B. Nobel

Chennai Mathematical Institute

June 2016

Chennai. India.

M.S. Computer Science

Chennai Mathematical Institute

June 2014

Chennai, India.

B.S. (Hons) Mathematics and Computer Science

Employment

Postdoctoral Associate at Duke University

June 2021 - present

Advisor: David Dunson

Research Interests

- Interpretable machine learning
- Robust statistical inference
- Stochastic processes and its applications

Teaching Experience

Introduction to Statistics, Primary Instructor

Fall 2019

Experience University of North Carolina at Chapel Hill.

Softwares

Developed R/C++ package CBCE: software for detecting bimodules in multi-view data. Programming languages: proficient in R, Python, and C++.

Papers

Published

- 1 Bhamidi S, Budhiraja A, and **Dewaskar M**. "Near Equilibrium Fluctuations for Supermarket Models with Growing Choices." (2022) *Annals of Applied Probability VOL. 32 (NO. 3)*, 2083-2138.
- 2 Goyal M, **Dewaskar M**, Duggirala PS, "NExG: Provable and Guided State Space Exploration of Neural Network Control Systems using Sensitivity Approximation" (2022) *IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems*, 2022, doi: 10.1109/TCAD.2022.3197524.
- 3 Bertrand N, **Dewaskar M**, Genest B, Gimbert H, and Godbole A. "Controlling a population." (2019) Logical Methods in Computer Science, Vol. 15, Issue 3.
- 4 Bertrand N, **Dewaskar M**, Genest B, Gimbert H "Controlling a population." (2017) 28th International Conference on Concurrency Theory (CONCUR 2017).

Preprint/Under Review

1 **Dewaskar M**, Palowitch J, He M, Love M.I., Nobel A.B. "Finding Stable Groups of Cross-Correlated Features in Multi-View data." (submitted to JMLR, 2022)

In Preparation

1 **Dewaskar M***, Tosh C*, Knoblauch J, Dunson D.B. "Robustifying the likelihood by optimistically re-weighting data."

Honors and Awards

Cambanis-Hoeffding-Nicholson award, STOR department, UNC Chapel Hill.	2017
Medal of Excellence, Chennai Mathematical Institute.	2016
Charpak Scholarship, Embassy of France in India.	2015
INSPIRE Scholarship. Department of Science and Technology. India.	2011

Talks

- 1 "Independence, L_p spaces, and Expectation inequalities", Guest Lecture in Probability and Measure Theory, Fall 2022, Duke University (Primary instructor: Galen Reeves).
- 2 "Finding stable groups of cross-correlated features in bi-view data," Joint Statistical Meetings, August 2022. (Speed Presentation and Poster)
- 3 "Groupwise cross-correlation mining in bi-view data," IISER Pune, August 2022.
- 4 "Guided State-Space Exploration in Closed Loop Control Systems Using Sensitivity Approximation," Systems and Control Engineering, IIT Bombay, July 2022.
- 5 "Finding significant communities in cross-correlation networks derived from multi-view data", SAMSI Seminars, January 2021.
- 6 "Near Equilibrium fluctuations for Supermarket models with growing choices," Bernoulli-IMS One World Symposium 2020, August 2020. (Online talk)

Professional Activities

- Mentoring undergraduate student Leona Yu for her senior thesis with Yue Jiang (Fall 2022 Spring 2023).
- Membership: International Society for Bayesian Analysis.

last updated: December 27, 2022; *: joint first authors.