Rajita Chandak

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Bernoulli Instructor Lausanne, Vaud, Switzerland *Institute of Mathematics, École Polytechnique Fédérale de Lausanne (EPFL)* 2024-2026 Mentor: Victor Panaretos **Assistant Professor** Madison, WI, USA Department of Statistics, University of Wisconsin-Madison starting 2026 Education Princeton, NJ, USA **Princeton University** Ph.D. in Operations Research and Financial Engineering (ORFE) 2019-2024 **Dissertation:** Adaptive nonparametric statistical theory and implementation Advisor: Matias Cattaneo **Princeton University** Princeton, NJ, USA M.A. in Operations Research and Financial Engineering (ORFE) 2019-2021 Providence, RI, USA **Brown University** Sc.B. with Honors in Applied Mathematics and Economics 2015-2019 Honors Thesis: Energy-aware optimization of scalable load balancing strategies Advisor: Kavita Ramanan **Honors and Awards** 2024 Scholar Award 2025 Maheshwari Vidya Pracharak Mandal (MVPM), Pune, India Invited paper for Annals of Statistics session at Joint Statistical Meeting (JSM) 2025 Paper: "Convergence Rates of Oblique Regression Trees for Flexible Function Libraries" Bernoulli Instructorship 2024 - 2026École Polytechnique Fédérale de Lausanne (EPFL), Switzerland School of Engineering and Applied Science Travel Grant 2023 Princeton University Finalist for Graduate Research Fellowship 2023 Iane Street School of Engineering and Applied Science Award for Excellence 2022 Princeton University

Research

lpcde: Estimation and Inference for Local Polynomial Conditional Density Estimators

Journal of Open Statistical Software, 10(107), 7241, March 2025

with Matias Cattaneo, Xinwei Ma and Michael Jansson

Convergence rates of oblique regression trees for flexible function libraries

Annals of Statistics 2024, Vol. 52, No. 2, 466-490

with Matias Cattaneo and Jason Klusowski

Boundary adaptive local polynomial conditional density estimators

Bernoulli, 2024, Vol. 30, No. 4, 3193-3223

with Matias Cattaneo, Xinwei Ma and Michael Jansson

On the convergence of a federated expectation-maximization algorithm with Zhixu Tao and Sanjeev Kulkarni

arxiv:2408.05819

Submitted

Consistency of the EM algorithm in high dimensions with Matias Cattaneo and Jason Klusowski	
A new variable importance metric for oblique regression trees	s
Work Experience	
NSF Research Experience for Undergraduates (REU) Award DMS 1757685	Worcester Polytechnic Institute (WPI), MA 2018
NSF Research Experience for Undergraduates (REU) Award NSF 1559788	California State University (CSU), Chico, CA 2017
Talks and Conferences	
24th European Young Statisticians Meeting (EYSM) Invited speaker	Torino, Italy July 2025
Conference for Women in Mathematics Invited speaker	Lausanne, Switzerland <i>May</i> 2025
University of Groningen Econometrics Seminar, Department of Economics	Groningen, NL February 2024
London School of Economics (LSE) Statistics Seminar, Department of Statistics	London, UK January 2024
University of Wisconsin-Madison Statistics Seminar, Department of Statistics	Virtual January 2024
EPFL Statistics Seminar Statistics Seminar, Institute of Mathematics	Virtual December 2023
Joint Statistical Meeting Invited speaker, Topic-contributed session on decision trees and randon	Toronto, CA august 2023
Statistical foundations of data science and their applications Princeton University Local organizing committee member	Princeton, NJ, USA May 2023
Jane Street Invited speaker, Graduate Research Fellowship Workshop	New York City, NY, USA April 2023
Symposium for Undergraduates in Mathematical Sciences (Sinvited speaker, hosted at Brown University	UMS) Providence, RI, USA 2018, 2019
Joint Mathematics Meeting AMS, MAA	Baltimore, MD, USA 2018, 2019
Women in Mathematics in New England (WIMIN) Smith College	Northampton, MA, USA September 2018
MIST Workshop WPI, Applied and Industrial Mathematics Institute for Secondary Tea	Worcester, MA, USA aching July 2018

Teaching Experience

ORFE, Princeton University

Lecturer (as Bernoulli Instructor)	Lausanne, CH
Institute of Mathematics, EPFL	2024-Present
MATH 524: Nonparametric estimation and inference (Spring 2025, Spring 2026).	
MATH 562: Statistical Inference (Fall 2025),	
MATH 413: Statistics for data science, Spring 2025 (co-taught with Myrto Limnios).	
Graduate Assistant in Instruction	Princeton, NJ, USA

2020-2024

ORF 499: Senior Thesis (Spring 2024),

SML 312: Research Projects in Data Science (Fall 2023),

ORF 498: Senior Independent Research Foundations (Fall 2023),

ORF 504: Financial Econometrics (Spring 2023),

ORF 524: Statistical Theory and Methods (Fall 2021, Fall 2022),

ORF 245: Fundamentals of Statistics (Fall 2020, Spring 2021).

Undergraduate Teaching Assistant

Department of Applied Mathematics, Brown University

2017 - 2019

Providence, RI, USA

APMA1720: Monte Carlo Simulations with Applications to Finance (Spring 2019),

MPA2065: Intro. to Data Science for the Masters of Public Affairs program (Spring 2018),

APMA1650: Statistical Inference I (Fall 2017).

Software and Programming Skills

R packages: lpcde

Python packages: **lpdensity**, **rddensity**

Additional programming experience: Matlab, Mathematica, Julia, C++, STATA, Java, HTML, CSS

Service

EPFL Statistics Seminar 2024–2026

Co-organizer

Peer Review Since 2021

Annals of Statistics, Bernoulli, Econometric Theory, Journal of the American Statistical Association (JASA), Journal of Causal Inference, Journal of Econometrics, Operations Research (OR).

Senior Thesis Writer's Group Co-Leader

Princeton, NJ

ORFE Department, Princeton University

2020-2023

Mentored 4th year undergraduate students in ORFE with thesis research and writing. Offered as a regular course (ORF 498/499) starting Fall 2023.

Languages

English: Native Proficiency Hindi: Native Proficiency French: Intermediate (CEFR A2)