

Rajita Chandak

Institute of Mathematics, EPFL – September 2025

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Appointments

Bernoulli Instructor

Institute of Mathematics, École Polytechnique Fédérale de Lausanne (EPFL)
Chargée de cours et collaboratrice scientifique.

Mentor: [Victor Panaretos](#)

Lausanne, Vaud, Switzerland

2024–2026

Education

Princeton University

Ph.D. in Operations Research and Financial Engineering (ORFE)
Dissertation: Adaptive nonparametric statistical theory and implementation

Advisor: [Matias Cattaneo](#)

Princeton, NJ, USA

2019–2024

Princeton University

M.A. in Operations Research and Financial Engineering (ORFE)

Princeton, NJ, USA

2019–2021

Brown University

S.C.B. with Honors in Applied Mathematics and Economics

Providence, RI, USA

2015–2019

Honors Thesis: Energy-aware optimization of scalable load balancing strategies

Advisor: [Kavita Ramanan](#)

Research

Publications

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, Vol. 52, No. 2, 466–490, April 2024

with [Matias Cattaneo](#) and [Jason Klusowski](#)

Boundary adaptive local polynomial conditional density estimators

Bernoulli, Vol. 30, No. 4, 3193–3223, November 2024

with [Matias Cattaneo](#), [Xinwei Ma](#) and [Michael Jansson](#)

Preprints

On the convergence of a federated expectation-maximization algorithm

with [Zhixu Tao](#) and [Sanjeev Kulkarni](#)

[arxiv:2408.05819](#)

Under review

Working Papers

Consistency of the EM algorithm in high dimensions

with [Matias Cattaneo](#) and [Jason Klusowski](#)

Manipulation testing based on distance to boundaries

with [Matias Cattaneo](#) and [Xinwei Ma](#) and [Michael Jansson](#)

A new variable importance metric for oblique regression trees

Honors and Awards

2024 Scholar Award

Maheshwari Vidya Pracharak Mandal (MVP), Pune, India

2025

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

École Polytechnique Fédérale de Lausanne (EPFL), Switzerland

2024 – 2026

School of Engineering and Applied Science Travel Grant

Princeton University

2023

Finalist for Graduate Research Fellowship	2023
<i>Jane Street</i>	
School of Engineering and Applied Science Award for Excellence	2022
<i>Princeton University</i>	

Talks and Conferences

CFE-CMStatistics	London, UK
<i>Invited speaker</i>	<i>December 2025</i>
24th European Young Statisticians Meeting (EYSM)	Torino, Italy
<i>Invited speaker</i>	<i>July 2025</i>
Conference for Women in Mathematics	Lausanne, Switzerland
<i>Invited speaker</i>	<i>May 2025</i>
University of Groningen	Groningen, NL
<i>Econometrics Seminar, Department of Economics</i>	<i>February 2024</i>
London School of Economics (LSE)	London, UK
<i>Statistics Seminar, Department of Statistics</i>	<i>January 2024</i>
University of Wisconsin-Madison	Virtual
<i>Statistics Seminar, Department of Statistics</i>	<i>January 2024</i>
EPFL Statistics Seminar	Virtual
<i>Statistics Seminar, Institute of Mathematics</i>	<i>December 2023</i>
Joint Statistical Meeting	Toronto, CA
<i>Invited speaker, Topic-contributed session on decision trees and random forests</i>	<i>August 2023</i>
Statistical foundations of data science and their applications	Princeton, NJ, USA
<i>Princeton University</i>	<i>May 2023</i>
<i>Local organizing committee member</i>	
Jane Street	New York City, NY, USA
<i>Invited speaker, Graduate Research Fellowship Workshop</i>	<i>April 2023</i>
Symposium for Undergraduates in Mathematical Sciences (SUMS)	Providence, RI, USA
<i>Invited speaker, hosted at Brown University</i>	<i>2018, 2019</i>
Joint Mathematics Meeting	Baltimore, MD, USA
<i>AMS, MAA</i>	<i>2018, 2019</i>
Women in Mathematics in New England (WIMIN)	Northampton, MA, USA
<i>Smith College</i>	<i>September 2018</i>
MIST Workshop	Worcester, MA, USA
<i>WPI, Applied and Industrial Mathematics Institute for Secondary Teaching</i>	<i>July 2018</i>

Teaching Experience

Lecturer (Chargée de cours)	Lausanne, CH
<i>Institute of Mathematics, EPFL</i>	<i>2024-Present</i>
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, USA
<i>ORFE, Princeton University</i>	<i>2020-2024</i>
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	Providence, USA
<i>Department of Applied Mathematics, Brown University</i>	<i>2017 – 2019</i>

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).

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

Software and Programming Skills

R packages: [lpcde](#)

Python packages: [lpdensity](#), [rddensity](#)

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

Service

Masters student supervision

2024–2026

Primary advisor

Mentoring masters theses and semester projects for students in Masters programs in the Institute of Mathematics (includes the Masters of Applied Mathematics, Masters of Statistics and Masters of Mathematics).

EPFL Statistics Seminar

2024–2026

Co-organizer

Since 2021

Peer Review

Annals of Statistics, Bernoulli, Econometric Theory, Journal of the American Statistical Association (JASA), Journal of Causal Inference (JCI), Journal of Econometrics (JOE), Journal of Machine Learning Research (JMLR), Journal of Statistical Planning and Inference, Operations Research (OR).

Senior Thesis Writer's Group Co-Leader

Princeton, NJ

2020-2023

ORFE Department, Princeton University

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 B1)