

Stanford



David Donoho

Anne T. and Robert M. Bass Professor in the School of Humanities and Sciences
Statistics

Bio

BIO

David Donoho is a mathematician who has made fundamental contributions to theoretical and computational statistics, as well as to signal processing and harmonic analysis. His algorithms have contributed significantly to our understanding of the maximum entropy principle, of the structure of robust procedures, and of sparse data description.

Research Statement:

My theoretical research interests have focused on the mathematics of statistical inference and on theoretical questions arising in applying harmonic analysis to various applied problems. My applied research interests have ranged from data visualization to various problems in scientific signal processing, image processing, and inverse problems.

ACADEMIC APPOINTMENTS

- Professor, Statistics
- Member, Institute for Computational and Mathematical Engineering (ICME)

LINKS

- Stanford Department of Statistics: <https://statistics.stanford.edu/people/david-donoho>

Teaching

COURSES

2019-20

- Analyses of Deep Learning: STATS 385 (Aut)
- Bootstrap, Cross-Validation, and Sample Re-use: STATS 208 (Win)
- Consulting Workshop: STATS 390 (Spr)
- Literature of Statistics: STATS 319 (Win)
- Massive Computational Experiments, Painlessly: STATS 285 (Aut)
- Theory of Probability: STATS 116 (Spr)

2018-19

- Introduction to Time Series Analysis: STATS 207 (Spr)
- Massive Computational Experiments, Painlessly: STATS 285 (Aut)

- Multivariate Analysis and Random Matrices in Statistics: STATS 325 (Spr)

2017-18

- Introduction to Time Series Analysis: STATS 207 (Spr)
- Introduction to the Bootstrap: STATS 208 (Spr)
- Massive Computational Experiments, Painlessly: STATS 285 (Aut)
- Theories of Deep Learning: STATS 385 (Aut)
- Theory of Probability: STATS 116 (Aut)

2016-17

- Introduction to Time Series Analysis: STATS 207 (Spr)
- Introduction to the Bootstrap: STATS 208 (Spr)
- Theory of Probability: STATS 116 (Aut)

STANFORD ADVISEES

Doctoral Dissertation Reader (AC)

Michael Celentano

Postdoctoral Faculty Sponsor

Mahsa Lotfi, Vardan Papyan

Doctoral Dissertation Advisor (AC)

Michael Feldman, Behrooz Ghorbani

Postdoctoral Research Mentor

Alon Kipnis, Vardan Papyan