

# Ryan Tibshirani

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## Positions

|  |                       |
|--|-----------------------|
| Professor, Depts. of Statistics and Machine Learning, Carnegie Mellon University           | July 2021 –           |
| Amazon Scholar, AWS AI Labs  | March 2020 –          |
| Principal Investigator, Delphi Group, Carnegie Mellon University                           | Nov 2012 –            |
| Associate Professor, Depts. of Statistics and Machine Learning, Carnegie Mellon University | July 2016 – June 2021 |
| Assistant Professor, Dept. of Statistics, Carnegie Mellon University                       | Aug 2011 – June 2016  |

## Education

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|---|-----------------------|
| Ph.D. in Statistics, Stanford University.<br>Thesis: “The Solution Path of the Generalized Lasso”.<br>Advisor: Jonathan Taylor. | Sept 2007 – Aug 2011  |
| B.S. in Mathematics, Stanford University.<br>Minor in Computer Science.   | Sept 2003 – June 2007 |

## Grants, Gift Funding

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|---|-----------------------|
| “New Perspectives on Deep Learning: Bridging Approximation, Statistical, and Algorithmic Theories”, National Science Foundation (NSF) Stimulating Collaborative Advances Leveraging Expertise in the Mathematical and Scientific Foundations of Deep Learning (SCALE MoDL) grant no. 2134133, total award amount (for CMU subcontract) \$450,000 (PI) | Nov 2021 – Oct 2024   |
| Unrestricted Gift from Google.org supporting Delphi’s COVIDcast project, \$1,000,000 (PI)   | Sept 2020             |
| Unrestricted Gift from Facebook supporting Delphi’s COVIDcast project, \$600,000 (PI)   | May 2020              |
| “Theoretical Foundations of Deep Learning”, Office of Naval Research (ONR) Multidisciplinary University Research Initiative (MURI) grant no. N00014-20-1-2787, total award amount (for CMU subcontract) \$903,104 (PI)  | July 2020 – July 2025 |
| “Delphi Influenza Forecasting Center of Excellence”, Centers for Disease Control and Prevention (CDC) grant no. U01IP001121, total award amount \$3,000,000 (co-PI, Roni Rosenfeld is PI)   | Sept 2019 — Aug 2024  |

|   |                       |
|---|-----------------------|
| “Improved Nowcasting via Adaptive Boosting of Highly Variable Biosurveillance Data Sources”, Defense Threat Reduction Agency (DTRA) grant no. HDTRA1-18-C-0008, total award amount \$1,016,057 (co-PI, Roni Rosenfeld is PI)                          | Nov 2017 – May 2020   |
| “Locally Adaptive Nonparametric Estimation for the Modern Age — New Insights, Extensions, and Inference Tools”, National Science Foundation (NSF) Division of Mathematical Sciences (DMS) CAREER grant no. 1554123, total award amount \$400,000 (PI) | July 2016 – June 2021 |
| “Graph Trend Filtering for Recommender Systems”, Adobe Digital Marketing Research Awards, total award amount \$50,000, (co-PI, Alex Smola is PI)  | Sept 2014 – Sept 2015 |
| “Advancing Theory and Computation in Statistical Learning Problems”, National Science Foundation (NSF) Division of Mathematical Sciences (DMS) grant no. 1309174, total award amount \$150,000 (PI)   | July 2013 – June 2016 |

## Awards, Fellowships, Honors

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|---|----------------------|
| Institute of Mathematical Statistics (IMS) Fellowship   | Apr 2022             |
| Policy Impact Award* from the American Association of Public Opinion Research (AAPOR)                       | Apr 2022             |
| Warren J. Mitofsky Innovators Award* from the American Association of Public Opinion Research (AAPOR)       | Apr 2022             |
| Allen Newell Award for Research Excellence* from the School of Computer Science, Carnegie Mellon University | Apr 2022             |
| Statistical Partnerships Among Academe, Industry, and Government (SPAIG) Award*                             | Oct 2021             |
| Teaching Innovation Award from Carnegie Mellon University   | Apr 2017             |
| Yahoo! Key Scientific Challenges Winner in Statistics and Machine Learning                                  | Sept 2010            |
| National Science Foundation (NSF) VIGRE Fellowship  | June 2007 – Aug 2010 |
| Honors in Mathematics, Distinction from Stanford University   | June 2007            |
| Phi Beta Kappa  | June 2007            |

\* = Awarded to the Delphi Group.

## Professional Service

### Selected Committees

|   |                       |
|---|-----------------------|
| Institute of Mathematical Statistics (IMS) Council                              | July 2022 – July 2025 |
| Scientific Advisory Board for Institute for Pure and Applied Mathematics (IPAM) | 2019 –                |

|   |      |
|---|------|
| Steering Committee for Association for Computing Machinery-Institute of Mathematical Statistics (ACM-IMS) Conference on Foundations of Data Science               | 2020 |
| Steering Committee for Association for Computing Machinery-Institute of Mathematical Statistics (ACM-IMS) Interdisciplinary Summit on Foundations of Data Science | 2019 |
| Associate Chair for Joint Statistical Meetings (JSM)  | 2018 |

## Editorial Service

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|--|-------------|
| Editor for Springer Series in the Data Sciences  | 2018 –      |
| Associate Editor for Journal of Machine Learning Research (JMLR)   | 2018 –      |
| Associate Editor for Journal of the American Statistical Association (JASA)  | 2019 – 2020 |
| Associate Editor for Annals of Statistics  | 2016 – 2020 |
| Area Chair for ML Conferences: Artificial Intelligence and Statistics (AISTATS), International Conference on Machine Learning (ICML), and Neural Information Processing Systems (NIPS) (usually one AC job per year) | 2014 – 2020 |
| Associate Editor for Biometrika  | 2013 – 2016 |
| Associate Editor for Statistical Analysis and Data Mining  | 2013 – 2016 |

## Referee Service

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|--|-------------|
| Referee for Annals of Statistics, Bernoulli, Journal of the Royal Statistical Society: Series B (JRSS-B), Journal of the American Statistical Society (JASA), Journal of Computational and Graphics Statistics (JCGS), Statistica Sinica, Biometrics, Statistics in Medicine, Journal of Machine Learning Research (JMLR), IEEE Transactions on Information Theory, IEEE Transactions on Pattern Analysis and Machine Intelligence Operations Research, Proceedings of the National Academy of Sciences (PNAS) | 2010 –      |
| Referee for Neural Information Processing Systems (NIPS) and International Conference on Machine Learning (ICML)   | 2013 – 2017 |
| Panelist for National Science Foundation (NSF) Division of Mathematical Sciences (DMS) CAREER Grant Program  | 2021        |
| Panelist for National Science Foundation (NSF) Division of Mathematical Sciences (DMS) Grant Program   | 2015        |
| Referee for National Security Agency and American Mathematical Society (NSA-AMS) Grant Program   | 2013        |

## Research Articles

See: <https://www.stat.cmu.edu/~ryantibs/research.html>.

Also: <https://scholar.google.com/citations?user=cQ1P1qoAAAAJ&hl=en>.

## **Software**

See: <https://www.github.com/ryantibs/>.

## **Teaching**

See: <https://www.stat.cmu.edu/~ryantibs/teaching.html>.

## **Talks**

See: <https://www.stat.cmu.edu/~ryantibs/talks.html>.