

DSO Department, BRI 307B  
Marshall School of Business  
University of Southern California  
Los Angeles, CA 90089

Phone: (213) 740-9916  
Email: fanyingy@usc.edu  
Web: <http://faculty.marshall.usc.edu/yingying-fan> [Google Scholar]

### Academic Positions

7/2023 - Present	Associate Dean for the Ph.D. Program, Marshall School of Business University of Southern California, Los Angeles, CA
7/2023 - Present	Dean's Cabinet, Marshall School of Business University of Southern California, Los Angeles, CA
1/2023 - 12/2025	IMS Editor of Statistics Surveys
5/2022 - Present	Board of Directors, USC Center for Applied Mathematical Sciences (CAMS) University of Southern California, Los Angeles, CA
6/2021 - Present	Centennial Chair in Business Administration ( <i>inaugural holder</i> ), Data Sciences and Operations Department, Marshall School of Business University of Southern California, Los Angeles, CA
12/2019 - Present	Professor, Data Sciences and Operations Department, Marshall School of Business University of Southern California, Los Angeles, CA
12/2019 - Present	Professor, Department of Economics, Dornsife College of Letters, Arts and Sciences University of Southern California, Los Angeles, CA
9/2020 - Present	Associate Member, USC Norris Comprehensive Cancer Center University of Southern California, Los Angeles, CA
3/2017 - Present	Associate Fellow, USC Dornsife Institute for New Economic Thinking (INET) University of Southern California, Los Angeles, CA
8/2016 - Present	Board Member, USC Machine Learning Center University of Southern California, Los Angeles, CA
8/2019 - 8/2021	Executive Board Member, USC Marshall Institute for Outlier Research in Business (iORB) University of Southern California, Los Angeles, CA
4/2018 - 6/2021	Dean's Associate Professor in Business Administration, Data Sciences and Operations Department, Marshall School of Business University of Southern California, Los Angeles, CA
4/2017 - 12/2019	Associate Professor, Department of Economics, Dornsife College of Letters, Arts and Sciences University of Southern California, Los Angeles, CA
4/2017 - 12/2019	Associate Professor, Department of Computer Science, Viterbi School of Engineering University of Southern California, Los Angeles, CA
4/2015 - 12/2019	Associate Professor, Data Sciences and Operations Department, Marshall School of Business University of Southern California, Los Angeles, CA
8/2015 - 12/2015	Visiting Scholar, Department of Statistics University of California, Berkeley, Berkeley, CA
6/2009 - 4/2015	Assistant Professor, Data Sciences and Operations Department, Marshall School of Business University of Southern California, Los Angeles, CA
8/2008 - 5/2009	Visiting Assistant Professor, Information and Operations Management Department, Marshall School of Business University of Southern California, Los Angeles, CA

7/2007 - 6/2008      Lecturer, Department of Statistics  
Harvard University, Cambridge, MA

## Education

9/2003 - 6/2007      Ph.D. in Operations Research and Financial Engineering  
Princeton University, Princeton, NJ  
9/2003 - 6/2006      M.S. in Operations Research and Financial Engineering  
Princeton University, Princeton, NJ  
9/1999 - 7/2003      B.S. in Statistics and Finance  
University of Science and Technology of China, China

## Honors, Awards and Grants

2023 - 2026      NSF Grant DMS-2310981, PI  
2023 - 2025      IMS Editor of Statistics Surveys  
2023      The 2023 Institute of Mathematical Statistics (IMS) Medallion Lecture  
2022 - 2023      *Inaugural* Marshall Fellow  
2021      Centennial Chair in Business Administration (*inaugural holder*)  
2021 - 2024      NSF Focused Research Group (FRG) Grant DMS-2052964, Co-PI  
2021 - 2023      USC Marshall Committee on Promotion & Tenure (P&T Committee)  
2020      Fellow of Institute of Mathematical Statistics (IMS)  
2019      Fellow of American Statistical Association (ASA)  
2018      Dean's Associate Professor in Business Administration  
2018 - 2023      NIH R01 Grant 1R01GM131407, PI  
2017      The Royal Statistical Society (RSS) Guy Medal in Bronze  
2017      2017 Dean's Award for Research Excellence  
2017 - 2018      Lord Foundation Grant, PI  
2016 - 2017      Marshall Outlier Research Grant, Co-PI  
2014      The *Inaugural* Dr. Douglas Basil Award for Junior Business Faculty  
2013      American Statistical Association (ASA) Noether Young Scholar Award  
2012 - 2017      National Science Foundation (NSF) Faculty Early Career Development (CAREER) Award DMS-1150318, PI  
2012 - Present      Associate Editors of *The Annals of Statistics* (2022 - Present), *Information and Inference* (2022 - Present), *Journal of Business & Economic Statistics* (2018 - Present), *Journal of Econometrics* (2015 - 2018), *Journal of the American Statistical Association* (2014 - Present), *Journal of Multivariate Analysis* (2013 - 2016), and *The Econometrics Journal* (2012 - Present)  
2011      Plenary Speaker at the Institute of Mathematical Statistics Workshop on Finance, Probability, and Statistics, Columbia University, New York  
2010 - 2011      2010 Zumberge Individual Award from USC's James H. Zumberge Faculty Research and Innovation Fund, PI

2010	2010 Dean's Award for Research Excellence
2009 - 2012	NSF Grant DMS-0906784, PI
2009 - Present	USC Marshall Summer Research Funding
2003 - 2004	Princeton University Fellowship
2003	Excellent Undergraduate Thesis of USTC
2003	Excellent Student of Anhui Province, China
2002	Baogang Scholarship
2000 - 2001	USTC First Class Scholarship

### Research Interests

- Statistics
- Data science
- Machine learning
- Economics
- Big data and business applications
- Artificial intelligence and blockchain

### Five Representative Publications

1. Chi, C.-M., Vossler, P., Fan, Y. and Lv, J. (2022). Asymptotic properties of high-dimensional random forests. *The Annals of Statistics* **50**, 3415–3438. [Link]
2. Fan, J., Fan, Y., Han, X. and Lv, J. (2022). SIMPLE: statistical inference on membership profiles in large networks. *Journal of the Royal Statistical Society Series B* **84**, 630–653. [Link]
3. Zhu, Z., Fan, Y., Kong, Y., Lv, J. and Sun, F. (2021). DeepLINK: deep learning inference using knockoffs with applications to genomics. *Proceedings of the National Academy of Sciences of the United States of America* **118**, e2104683118. [Link]
4. Candès, E. J., Fan, Y., Janson, L. and Lv, J. (2018). Panning for gold: ‘model-X’ knockoffs for high dimensional controlled variable selection. *Journal of the Royal Statistical Society Series B* **80**, 551–577. [Link]
5. Fan, Y. and Tang, C. (2013). Tuning parameter selection in high dimensional penalized likelihood. *Journal of the Royal Statistical Society Series B* **75**, 531–552. [Link]

### Professional Memberships

- American Association for the Advancement of Science
- American Statistical Association
- Institute for Operations Research and the Management Sciences
- Institute of Mathematical Statistics
- International Chinese Statistical Association
- Royal Statistical Society