

Jinshuo Dong

- Contact** Email: jinshuo@northwestern.edu djs.pku@gmail.com
Webpage: <https://www2.math.upenn.edu/~jinshuo>
Phone: (267)324-9493
- Employment** **Northwestern University** Sep 2020 - Now
Postdoctoral fellow at the Institute for Data, Econometrics, Algorithms, and Learning (IDEAL) and Northwestern University
- Education** **University of Pennsylvania**, Ph.D. in Applied Mathematics May 2020
Thesis Advisor: Aaron Roth
Peking University, B.S. in Mathematics July 2014
- Selected Publications**
- **Error-Tolerant E-Discovery Protocols**
with Jason Hartline, Liren Shan and Aravindan Vijayaraghavan
To appear in CSLAW 2024
 - **Gaussian Differential Privacy**
with Aaron Roth and Weijie Su
Discussion paper¹ in *Journal of the Royal Statistical Society: Series B (JRSSB)*, 2022
- Full List of Publications**
1. **Error-Tolerant E-Discovery Protocols**
with Jason Hartline, Liren Shan and Aravindan Vijayaraghavan
To appear in the 3rd ACM CSLAW Symposium
 2. **Classification Protocols with Minimal Disclosure**
with Jason Hartline and Aravindan Vijayaraghavan
In the Proceedings of the 2nd ACM Computer Science and Law Symposium (CSLAW 2022)
 3. **Log-Concave and Multivariate Canonical Noise Distributions for Differential Privacy**
with Jordan Awan
In the Proceedings of NeurIPS 2022
 4. **Optimal Accounting of Differential Privacy via Characteristic Function**
with Yuqing Zhu and Yu-Xiang Wang
In the Proceedings of AISTATS 2022
 5. **Rejoinder: Gaussian Differential Privacy**
with Aaron Roth and Weijie Su
Journal of the Royal Statistical Society: Series B (JRSSB), 2022
 6. **Gaussian Differential Privacy**
with Aaron Roth and Weijie Su
Discussion paper in *Journal of the Royal Statistical Society: Series B (JRSSB)*, 2022
 7. **A Central Limit Theorem for Differentially Private Query Answering**
with Weijie Su and Linjun Zhang
In the Proceedings of NeurIPS 2021 (Spotlight)
 8. **Privacy Amplification via Iteration for Shuffled and Online PNSGD**
with Matteo Sordello and Zhiqi Bu
In the Proceedings of ECML/PKDD 2021
 9. **Deep Learning with Gaussian Differential Privacy**
with Zhiqi Bu, Qi Long and Weijie Su
Harvard Data Science Review, 2020(23), 2020

¹Roughly equivalent to best paper awards at top CS conferences

10. **Sharp Composition Bounds for Gaussian Differential Privacy via Edgeworth Expansion**
with Qinqing Zheng, Qi Long and Weijie Su
In the Proceedings of ICML 2020
 11. **Optimal Differential Privacy Composition for Exponential Mechanisms**
with David Durfee and Ryan Rogers
In the Proceedings of ICML 2020
 12. **Equilibrium Characterization for Data Acquisition Games**
with H. Elzayn, S. Jabbari, M. Kearns, Z. Schutzman
In the Proceedings of IJCAI 2019
 13. **Strategic Classification with Revealed Preferences**
with A. Roth, Z. Schutzman, B. Waggoner, Z. Wu
In the Proceedings of EC 2018
- Gaussian Differential Privacy and Related Techniques**
PhD Thesis

Service

Conference reviewer:

EC 2023, COLT 2023, NeurIPS 2022, COLT 2022, AISTATS 2022. ICLR 2022, Privacy in Machine Learning (PriML) 2021, NeurIPS 2021, FOCS 2021, MFCS 2021, WADS 2021, FORC 2021, SODA 2021, STOC 2020, EC 2018,
Journal referee: Electronic Journal of Statistics

Teaching

As instructor:

CS 335: Introduction to the Theory of Computation	2022/2023 Fall
CS 396: Differential Privacy: from Foundations to Machine Learning	2023/2024 Spring

As TA/recitation instructor:

MATH 584: Mathematics of Medical Imaging	2017 Spring
MATH 313: Undergraduate Computational Linear Algebra	2017 Spring
AMCS 602: Graduate Numerical Linear Algebra	2016 Fall
MATH 241: Calculus IV: Applied PDE	2016 Spring
MATH 502: Abstract Algebra	2015 Fall

Programming Languages

Julia, Python, R, C, C++, TensorFlow, MatLab, Bash, L^AT_EX

References

Aaron Roth

Professor of Computer and Information Science
Department of Computer Science
University of Pennsylvania
3401 Walnut Street, room 406b
Philadelphia, PA 19104
Phone: 215-746-6171
Email: aaroth@cis.upenn.edu

Jason Hartline

Professor of Computer Science
Department of Computer Science
McCormick School of Engineering
Northwestern University
Seeley Mudd 3015, 2233 Tech Drive
Evanston, IL 60208
Phone: 847-467-0280

Email: hartline@northwestern.edu

Weijie Su

Associate Professor of Statistics
Wharton Statistics and Data Science Department
University of Pennsylvania
411 Academic Research Building, 265 South 37th Street
Philadelphia, PA 19104
Phone: 215-746-8565
Email: suw@wharton.upenn.edu

Aravindan Vijayaraghavan

Associate Professor of Computer Science
Department of Computer Science
McCormick School of Engineering
Northwestern University
Seeley Mudd 3011, 2233 Tech Drive
Evanston, IL 60208
Phone: (609) 578-7376
Email: aravindv@northwestern.edu