Clément L. Canonne

Curriculum Vitæ

✉ *clement.canonne@sydney.edu.au*

Research Area

Distribution testing, property testing, and learning theory, focusing on the computational aspects of machine learning and statistical inference under resource or information constraints; as well as rigorous approaches to data privacy, specifically differential privacy.

Employment History

2024–	**Senior Lecturer**, *School of Computer Science*, University of Sydney
2021–2023	**Lecturer**, *School of Computer Science*, University of Sydney
2019–2020	**Goldstine Postdoctoral Fellow**, *IBM Research*, San Jose
2017–2019	**Motwani Postdoctoral Fellow**, *Stanford University*, Stanford Host: Prof. Moses Charikar.
August. 2017	**Visiting Scholar**, *Northwestern University* Host: Prof. Anindya De
June–July. 2016	**Visiting Scholar**, *USC* Host: Prof. Ilias Diakonikolas
May–Aug. 2014	**Summer Intern**, *Microsoft Research New England* Host: Prof. Madhu Sudan
June–Aug. 2013	**Visiting Scholar**, *MIT* Host: Prof. Ronitt Rubinfeld

Education

2012–2017	**Ph.D. (Computer Science)**, *Columbia University*, New York Adviser: Prof. Rocco Servedio Thesis: *Property Testing and Probability Distributions: New Techniques, New Models, and New Goals.*
Sept. 2012	**M.Sc. (Computer Science)**, *MPRI (Parisian Master of Research in Computer Science)*, Paris, *magna cum laude*
2011–2012	**M.Sc.**, *École Centrale Paris*[1], Paris *Diplôme d'Ingénieur. Applied Mathematics*, majoring in *Machine Learning and Computer Vision.*
June 2011	**Bachelor's Degree (Engineering)**, *École Centrale Paris*, Paris
Spring 2011	**Exchange Student**, *Princeton University*, Princeton, NJ, United States, (Senior)
June 2010	**Bachelor's Degree (Mathematics)**, *Université Pierre et Marie Curie*, Paris, *summa cum laude* Specialization in Probabilities, Measure Theory and Topology

Honorary Affiliations

Sydney AI Centre, University of Sydney

Sydney Quantum Academy (SQA), *NSW*

Digital Science Initiative, *Data-Centric Engineering*, University of Sydney

Honors and Awards

○ 2024 Caspar Bowden Award for Outstanding Research in Privacy Enhancing Technologies
Presented annually to researchers who have made an outstanding contribution to the theory, design, implementation, or deployment of privacy enhancing technologies

○ NSW Young Tall Poppy Science Award, *NSW (2023)*

- ○ ARC Discovery Early Career Researcher Award (DECRA), *(2023)*
  Project: Trading Privacy, Bandwidth and Accuracy in Algorithmic Machine Learning
- ○ Morton B. Friedman Memorial Prize for Excellence at Columbia Engineering, *Columbia University (2018)*
- ○ Andrew P. Kosoresow Memorial Award for Outstanding Performance in TA-ing and Service, *Columbia University (2017)*
- ○ Computer Science Service Award, *Columbia University (2014, 2015, 2016, and 2017)*
- ○ Paul Charles Michelman Memorial Award for Exemplary Service, *Columbia University (2014 and 2017)*
- ○ Computer Science Chair's Distinguished Fellowship, *Columbia University (2012)*

Publications

Journal papers

Jayadev Acharya, **Clément L. Canonne**, Aditya Vikram Singh, and Himanshu Tyagi. Optimal rates for nonparametric density estimation under communication constraints. *IEEE Trans. Inf. Theory*, 70(3):1939–1961, 2024.

Clément L. Canonne and Gautam Kamath Thomas Steinke. The discrete gaussian for differential privacy. *Journal of Privacy and Confidentiality (JPC)*, 12(1), July 2022.

Jayadev Acharya, **Clément L. Canonne**, Yuhan Liu, Ziteng Sun, and Himanshu Tyagi. Interactive inference under information constraints. *IEEE Transactions on Information Theory*, 68(1):502–516, 2022.

Jayadev Acharya, **Clément L. Canonne**, Cody Freitag, Ziteng Sun, and Himanshu Tyagi. Inference under information constraints III: local privacy constraints. *IEEE Journal on Selected Areas in Information Theory*, 2(1):253–267, 2021.

Clément L. Canonne, Ilias Diakonikolas, Daniel M. Kane, and Alistair Stewart. Testing Bayesian networks. *IEEE Transactions on Information Theory*, 66(5):3132–3170, 2020.

Jayadev Acharya, **Clément L. Canonne**, and Himanshu Tyagi. Inference under information constraints II: communication constraints and shared randomness. *IEEE Transactions on Information Theory*, 66(12):7856–7877, 2020.

Jayadev Acharya, **Clément L. Canonne**, and Himanshu Tyagi. Inference under information constraints I: lower bounds from chi-square contraction. *IEEE Transactions on Information Theory*, 66(12):7835–7855, 2020.

Clément L. Canonne, Elena Grigorescu, Siyao Guo, Akash Kumar, and Karl Wimmer. Testing k-monotonicity: The rise and fall of Boolean functions. *Theory of Computing*, 15(1):1–55, 2019.

Eric Blais, **Clément L. Canonne**, and Tom Gur. Distribution testing lower bounds via reductions from communication complexity. *ACM Transactions on Computation Theory*, 11(2):6:1–6:37, 2019.

Eric Blais, **Clément L. Canonne**, Talya Eden, Amit Levi, and Dana Ron. Tolerant junta testing and the connection to submodular optimization and function isomorphism. *ACM Transactions on Computation Theory*, 11(4):24:1–24:33, 2019.

Clément L. Canonne and Tom Gur. An adaptivity hierarchy theorem for property testing. *computational complexity*, 27(4):671–716, 2018.

Clément L. Canonne, Themis Gouleakis, and Ronitt Rubinfeld. Sampling correctors. *SIAM Journal on Computing*, 47(4):1373–1423, 2018.

Clément L. Canonne, Ilias Diakonikolas, Themis Gouleakis, and Ronitt Rubinfeld. Testing shape restrictions of discrete distributions. *Theory of Computing Systems*, 62(1):4–62, 2018. Invited issue for STACS 2016.

Jayadev Acharya, **Clément L. Canonne**, and Gautam Kamath. A chasm between identity and equivalence testing with conditional queries. *Theory of Computing*, 14(19):1–46, 2018.

Clément L. Canonne, Venkatesan Guruswami, Raghu Meka, and Madhu Sudan. Commu-

nication with imperfectly shared randomness. *IEEE Transactions on Information Theory*, 63(10):6799–6818, 2017.

Clément L. Canonne, Dana Ron, and Rocco A. Servedio. Testing probability distributions using conditional samples. *SIAM Journal on Computing (SICOMP)*, 44(3):540–616, 2015.

Conference papers

Clément L. Canonne, Francis E. Su, and Salil P. Vadhan. The randomness complexity of differential privacy. In *ITCS*, volume 325 of *LIPIcs*, pages 27:1–27:21, 2025.

Clément L. Canonne, Sayantan Sen, and Joy Qiping Yang. Settling the complexity of testing grainedness of distributions, and application to uniformity testing in the huge object model. In *ITCS*, volume 325 of *LIPIcs*, pages 26:1–26:19, 2025.

Clément L. Canonne, Themis Gouleakis, Yuhao Wang, and Joy Qiping Yang. Gaussian mean testing under truncation. In *AISTATS*, 2025. (To appear.).

Clément L. Canonne and Abigail Gentle. Locally private histograms in all privacy regimes. In *ITCS*, volume 325 of *LIPIcs*, pages 25:1–25:24, 2025.

Davin Choo, Joy Qiping Yang, Arnab Bhattacharyya, and **Clément L. Canonne**. Learning bounded-degree polytrees with known skeleton. In *International Conference on Algorithmic Learning Theory (ALT)*. PMLR, 2024.

Clément L. Canonne and Joy Qiping Yang. Simpler distribution testing with little memory. In *2024 Symposium on Simplicity in Algorithms (SOSA)*. SIAM, 2024.

Clément L. Canonne and Joy Qiping Yang. Entropy testing and its application to testing bayesian networks. In *Advances in Neural Information Processing Systems 37 (NeurIPS)*, volume 37, pages 132977–133006. Curran Associates, Inc., 2024.

Clément L. Canonne and Yucheng Sun. Private distribution testing with heterogeneous constraints: Your epsilon might not be mine. In *Innovations in Theoretical Computer Science (ITCS)*, volume 287 of *LIPIcs*, pages 23:1–23:24, 2024.

Clément L. Canonne, Ziteng Sun, and Ananda Theertha Suresh. Concentration bounds for discrete distribution estimation in KL divergence. In *IEEE International Symposium on Information Theory, ISIT 2023*, pages 2093–2098. IEEE, 2023.

Clément L. Canonne, Samuel B. Hopkins, Jerry Li, Allen Liu, and Shyam Narayanan. The full landscape of robust mean testing: Sharp separations between oblivious and adaptive contamination. In *64th IEEE Annual Symposium on Foundations of Computer Science, FOCS*, pages 36–45. IEEE, 2023.

Shai Ben-David, Alex Bie, **Clément L. Canonne**, Gautam Kamath, and Vikrant Singhal. Private distribution learning with public data: The view from sample compression. In *Advances in Neural Information Processing Systems 36 (NeurIPS)*, 2023.

Vipul Arora, Arnab Bhattacharyya, **Clément L. Canonne**, and Joy Qiping Yang. Near-optimal degree testing for bayes nets. In *IEEE International Symposium on Information Theory, ISIT 2023*, pages 2093–2098. IEEE, 2023.

Jayadev Acharya, **Clément L. Canonne**, Ziteng Sun, and Himanshu Tyagi. Unified lower bounds for interactive high-dimensional estimation under information constraints. In *Advances in Neural Information Processing Systems 36 (NeurIPS)*, 2023.

Anand Jerry George and **Clément L. Canonne**. Robust testing in high-dimensional sparse models. In *Advances in Neural Information Processing Systems 35 (NeurIPS)*, 2022. (Contribution order).

Clément L. Canonne and Hongyi Lyu. Uniformity testing in the shuffle model: Simpler, better, faster. In *SIAM Symposium on Simplicity in Algorithms (SOSA)*, pages 182–202. SIAM, 2022.

Clément L. Canonne, Ayush Jain, Gautam Kamath, and Jerry Li. The price of tolerance in distribution testing. In *35th Conference on Learning Theory (COLT)*, volume 178 of *Proceedings of Machine Learning Research*, pages 573–624, 2022.

Clément L. Canonne, Ilias Diakonikolas, Daniel Kane, and Sihan Liu. Nearly-tight bounds for testing histogram distributions. In *Advances in Neural Information Processing Systems 35 (NeurIPS)*, 2022.

Arnab Bhattacharyya, **Clément L. Canonne**, and Joy Qiping Yang. Independence testing for bounded degree bayesian networks. In *Advances in Neural Information Processing Systems 35 (NeurIPS)*, 2022.

Jayadev Acharya, **Clément L. Canonne**, Ziteng Sun, and Himanshu Tyagi. The role of interactivity in structured estimation. In *35th Conference on Learning Theory (COLT)*, volume 178 of *Proceedings of Machine Learning Research*, pages 1328–1355, 2022.

Clément L. Canonne and Karl Wimmer. Identity testing under label mismatch. In *International Symposium on Algorithms and Computation (ISAAC)*, 2021.

Clément L. Canonne, Xi Chen, Gautam Kamath, Amit Levi, and Erik Waingarten. Random restrictions of high-dimensional distributions and uniformity testing with subcube conditioning. In *ACM–SIAM Symposium on Discrete Algorithms (SODA)*, 2021.

Jayadev Acharya, **Clément L. Canonne**, Aditya Vikram Singh, and Himanshu Tyagi. Optimal rates for nonparametric density estimation under communication constraints. In *Advances in Neural Information Processing Systems 34 (NeurIPS)*, 2021.

Jayadev Acharya, **Clément L. Canonne**, Prathamesh Mayekar, and Himanshu Tyagi. Information-constrained optimization: can adaptive processing of gradients help? In *Advances in Neural Information Processing Systems 34 (NeurIPS)*, 2021.

Jayadev Acharya, **Clément L. Canonne**, Yuhan Liu, Ziteng Sun, and Himanshu Tyagi. Interactive inference under information constraints. In *IEEE International Symposium on Information Theory (ISIT)*, 2021.

Jayadev Acharya, **Clément L. Canonne**, Yuhan Liu, Ziteng Sun, and Himanshu Tyagi. Distributed estimation with multiple samples per user: Sharp rates and phase transition. In *Advances in Neural Information Processing Systems 34 (NeurIPS)*, 2021.

Clément L. Canonne and Karl Wimmer. Testing data binnings. In *APPROX/RANDOM*, volume 176 of *LIPIcs*, pages 24:1–24:13. Schloss Dagstuhl - Leibniz-Zentrum für Informatik, 2020.

Clément L. Canonne, Gautam Kamath, and Thomas Steinke. The discrete gaussian for differential privacy. In *Advances in Neural Information Processing Systems 33 (NeurIPS)*, 2020.

Clément L. Canonne, Gautam Kamath, Audra McMillan, Jonathan Ullman, and Lydia Zakynthinou. Private identity testing for high-dimensional distributions. In *Advances in Neural Information Processing Systems 33 (NeurIPS)*, 2020. Spotlight Presentation.

Clément L. Canonne, Anindya De, and Rocco A. Servedio. Learning from satisfying assignments under continuous distributions. In *ACM–SIAM Symposium on Discrete Algorithms (SODA)*, pages 82–101. SIAM, 2020.

Jayadev Acharya, **Clément L. Canonne**, and Himanshu Tyagi. Distributed signal detection under communication constraints. In *33rd Conference on Learning Theory (COLT)*, volume 125 of *Proceedings of Machine Learning Research*, pages 41–63. PMLR, 2020.

Jayadev Acharya, **Clément L. Canonne**, Yanjun Han, Ziteng Sun, and Himanshu Tyagi. Domain compression and its application to randomness-optimal distributed goodness-of-fit. In *33rd Conference on Learning Theory (COLT)*, volume 125 of *Proceedings of Machine Learning Research*, pages 3–40. PMLR, 2020.

Clément L. Canonne, Gautam Kamath, Audra McMillan, Adam D. Smith, and Jonathan Ullman. The structure of optimal private tests for simple hypotheses. In *51st Annual ACM SIGACT Symposium on Theory of Computing (STOC)*, pages 310–321. ACM, 2019.

Omri Ben-Eliezer, **Clément L. Canonne**, Shoham Letzter, and Erik Waingarten. Finding monotone patterns in sublinear time. In *60th Annual Symposium on Foundations of Computer Science (FOCS)*, pages 1469–1494. IEEE Computer Society, 2019.

Jayadev Acharya, **Clément L. Canonne**, and Himanshu Tyagi. Inference under information constraints: Lower bounds from chi-square contraction. In *32nd Conference on Learning Theory (COLT)*, volume 99 of *Proceedings of Machine Learning Research*, pages 3–17. PMLR, 2019.

Jayadev Acharya, **Clément L. Canonne**, and Himanshu Tyagi. Communication-constrained inference and the role of shared randomness. In *36th International Conference on Machine Learning (ICML)*, volume 97 of *Proceedings of Machine Learning Research*, pages 30–39. PMLR, 2019. Long oral.

Jayadev Acharya, **Clément L. Canonne**, Cody Freitag, and Himanshu Tyagi. Test without trust: Optimal locally private distribution testing. In *The 22nd International Conference on Artificial Intelligence and Statistics (AISTATS)*, volume 89 of *Proceedings of Machine Learning Research*, pages 2067–2076. PMLR, 2019.

Clément L. Canonne, Ilias Diakonikolas, and Alistair Stewart. Testing for families of distributions via the Fourier transform. In *Advances in Neural Information Processing Systems 31 (NeurIPS)*, pages 10063–10074. Curran Associates, Inc., 2018.

Clément L. Canonne, Ilias Diakonikolas, Daniel M. Kane, and Alistair Stewart. Testing conditional independence of discrete distributions. In *50th ACM Symposium on Theory of Computing (STOC)*, pages 735–748. ACM, 2018.

Eric Blais, **Clément L. Canonne**, Talya Eden, Amit Levi, and Dana Ron. Tolerant junta testing and the connection to submodular optimization and function isomorphism. In *ACM–SIAM Symposium on Discrete Algorithms (SODA)*, pages 2113–2132. SIAM, 2018.

Omri Ben-Eliezer and **Clément L. Canonne**. Improved bounds for testing forbidden order patterns. In *ACM–SIAM Symposium on Discrete Algorithms (SODA)*, pages 2093–2112. SIAM, 2018.

Clément L. Canonne and Tom Gur. An adaptivity hierarchy theorem for property testing. In *Computational Complexity Conference (CCC)*, 2017.

Clément L. Canonne, Elena Grigorescu, Siyao Guo, Akash Kumar, and Karl Wimmer. Testing k-monotonicity. In *8th Innovations in Theoretical Computer Science (Innovations in Theoretical Computer Science (ITCS))*. ACM, 2017.

Clément L. Canonne, Ilias Diakonikolas, Daniel M. Kane, and Alistair Stewart. Testing Bayesian networks. In *30th Annual Conference on Learning Theory (COLT)*, 2017.

Eric Blais, **Clément L. Canonne**, and Tom Gur. Distribution testing lower bounds via reductions from communication complexity. In *Computational Complexity Conference (CCC)*, 2017.

Tuğkan Batu and **Clément L. Canonne**. Generalized uniformity testing. In *IEEE 58th Annual Symposium on Foundations of Computer Science (FOCS)*, pages 880–889. IEEE Computer Society, 2017.

Clément L. Canonne, Themis Gouleakis, and Ronitt Rubinfeld. Sampling correctors. In *7th Innovations in Theoretical Computer Science (Innovations in Theoretical Computer Science (ITCS))*. ACM, 2016.

Clément L. Canonne, Ilias Diakonikolas, Themis Gouleakis, and Ronitt Rubinfeld. Testing shape restrictions of discrete distributions. In *33rd International Symposium on Theoretical Aspects of Computer Science (STACS)*, 2016. Invited to the *Theory of Computing Systems* Special Issue.

Clément L. Canonne. Are few bins enough: Testing histogram distributions. In *35th ACM SIGMOD-SIGACT-SIGAI Symposium on Principles of Database Systems (PODS)*. ACM, 2016.

Clément L. Canonne, Venkatesan Guruswami, Raghu Meka, and Madhu Sudan. Communication with imperfectly shared randomness. In *6th Innovations in Theoretical Computer Science (Innovations in Theoretical Computer Science (ITCS))*, 2015.

Clément L. Canonne. Big Data on the rise: Testing monotonicity of distributions. In *42nd International Conference on Automata, Languages and Programming (ICALP)*, 2015.

Eric Blais, **Clément L. Canonne**, Igor C. Oliveira, Rocco A. Servedio, and Li-Yang Tan. Learning circuits with few negations. In *APPROX-RANDOM*, 2015.

Jayadev Acharya, **Clément L. Canonne**, and Gautam Kamath. A chasm between identity and equivalence testing with conditional queries. In *APPROX-RANDOM*, 2015.

Jayadev Acharya, **Clément L. Canonne**, and Gautam Kamath. Adaptive estimation in weighted group testing. In *IEEE International Symposium on Information Theory (ISIT)*, 2015.

Clément L. Canonne and Ronitt Rubinfeld. Testing probability distributions underlying aggregated data. In *41st International Conference on Automata, Languages and Programming (ICALP)*, 2014.

Clément L. Canonne, Dana Ron, and Rocco A. Servedio. Testing equivalence between distributions using conditional samples. In *ACM–SIAM Symposium on Discrete Algorithms (SODA)*, 2014.

Surveys and monographs

Clément L. Canonne. Topics and techniques in distribution testing: A biased but representative sample. *Foundations and Trends® in Communications and Information Theory*, 19(6):1032–1198, 2022.

Clément L. Canonne. A survey on distribution testing: Your data is big. but is it blue? *Theory of Computing*, (9):1–100, 2020.

Manuscripts

Clément L. Canonne and Abigail Gentle. Locally private histograms in all privacy regimes. *CoRR*, abs/2408.04888, 2024.

Yiyang Huang and **Clément L. Canonne**. Tight bounds for machine unlearning via differential privacy. *CoRR*, abs/2309.00886, 2023.

Yihui Quek, **Clément L. Canonne**, and Patrick Rebentrost. Robust quantum minimum finding with an application to hypothesis selection. *CoRR*, abs/2003.11777, 2020. Contribution order.

Invited Talks

- Simons Institute program on Sublinear Algorithms, *May 20 – Friday, August 9, 2024*
  `https://simons.berkeley.edu/talks/clement-canonne-university-sydney-2024-05-24`
- Beyond IID in Information Theory 11 (University of Tübingen, Germany), *July 31– August 4, 2023*
  `https://sites.google.com/view/beyondiid11/beyond-iid-11`
- Information Theory and Data Science Workshop (Singapore), *January 16–27, 2023*
  `https://ims.nus.edu.sg/events/information-theory-and-data-science-workshop/`
- Privacy-Preserving Machine Learning (PPML) Workshop at FOCS'22, *November 1, 2022*
  `https://ppml-workshop.github.io/`
- Mentoring Talk at DICTA'22, *October 29, 2022*
  `https://dictaconference.org/dicta2022/`
- Learning Theory Alliance Mentoring Workshop at ALT'22, *March 15, 2022*
  `https://let-all.com/alt22.html`
- 2021 Croucher Summer Course in Information Theory (CSCIT), *August 23–28, 2021*
  `http://cscit.ie.cuhk.edu.hk/`
- Conference on robustness and privacy, *March 22–23, 2021*
  `https://lecueguillaume.github.io/2021/02/17/conf_robust_privacy/`
- Simons Institute program on Probability, Geometry, and Computation in High Dimensions, *August 19 – December 18, 2020*
  `https://simons.berkeley.edu/programs/hd20`
- Inference problems: algorithms and lower bounds, *August 31–September 4, 2020*
  `https://www.uni-frankfurt.de/84973818/Inference_problems__algorithms_and_lower_bounds`

- 2019 Information Theory and Applications (ITA) Workshop, *February 10–15, 2019*
  `https://ita.ucsd.edu/ws/19/`
- Workshop on Local Algorithms (WOLA) 2019, *July 20–22, 2019*
  `http://people.inf.ethz.ch/gmohsen/WOLA19/`
- Workshop on Local Algorithms (WOLA) 2018, *June 14–15, 2018*
  `http://people.csail.mit.edu/joanne/WOLA18.html`
- Workshop on Data Summarization, University of Warwick, *March 19–22, 2018*
  `https://warwick.ac.uk/fac/sci/dcs/research/focs/conf2017/`
- 2018 Information Theory and Applications (ITA) Workshop, *February 11–16, 2018*
  `https://ita.ucsd.edu/workshop/18/`
- 2017 Information Theory and Applications (ITA) Workshop, *February 12–17, 2017*
  `https://ita.ucsd.edu/workshop/17/`

Service

- General Chair for the 66th Annual IEEE Symposium on Foundations of Computer Science (FOCS'25)
- Technical Program Committee Co-Chair for the 2025 IEEE Information Theory Workshop (ITW'25)
- Program Committee member for the 2025 IGAFIT Highlights of Algorithms conference (HALG)
- Senior Program Committee member for the 38th Annual Conference on Learning Theory (COLT'25)
- Organizing Co-Chair for the 35th International Symposium on Algorithms and Computation (ISAAC'24)
- PC Chair for the 2024 Workshop on Local Algorithms (WoLA'24)
- Co-organizer of the Simons Institute's program on Sublinear Algorithms (Summer 2024)
- Program Committee member for the 2024 SIAM Symposium on Simplicity in Algorithms (SOSA)
- Senior Program Committee (Senior PC) member for the 36th Annual Conference on Learning Theory (COLT'23)
- Program Committee member for the 2023 International Colloquium on Automata, Languages and Programming (ICALP'23)
- Program Committee member for RANDOM'21 and '23
- Open Problems Chair for the 35th Annual Conference on Learning Theory (COLT'22)
- Program Committee member for the 29th European Symposium on Algorithms (ESA 2021), Track A (design and analysis)
- Social (co)Chair for the 53rd, 54th, and 55th Annual ACM Symposium on Theory of Computing (STOC'21, '22, and '23)
- Program Committee member for the ACM-SIAM Symposium on Discrete Algorithms (SODA'21 and '23)
- Program Committee member for the 61st Annual IEEE Symposium on Foundations of Computer Science (FOCS'20)
- Program Committee member for the 11th Innovations in Theoretical Computer Science (ITCS'20)
- Steering Committee Member for the *Workshop on Local Algorithms* (WoLA)
- Co-organized an international workshop in February 2024: *Sydney Privacy Workshop 2024* (with Salil Vadhan):
  `https://sites.google.com/view/sydney-privacy-workshop-2024/`
- Co-organized an international AMSI–AustMS Workshop in May–June 2022: *Bridging Maths and Computer Science*:
  `https://sites.google.com/view/2022-workshop-bridgingmathstcs/`

- Co-organized an invited tutorial for COLT'21: *Statistical Inference in Distributed or Constrained Settings* (with Jayadev Acharya and Himanshu Tyagi):
  `https://ccanonne.github.io/tutorials/colt2021/`
- Co-organized a workshop for FOCS'23: *Algorithmic Aspects of High-Dimensional Probabilistic Models* (with Arnab Bhattacharyya):
  `https://ccanonne.github.io/tutorials/focs2023/`
- Co-organized a tutorial for FOCS'20: *Lower Bounds for Statistical Inference in Distributed and Constrained Settings* (with Jayadev Acharya and Himanshu Tyagi):
  `http://www.cs.columbia.edu/~ccanonne/tutorial-focs2020/`
- Co-organized a workshop for FOCS'19: *A TCS Quiver* (with Gautam Kamath):
  `http://www.cs.columbia.edu/~ccanonne/workshop-focs2019/`
- Co-organized a workshop for FOCS'17: *Frontiers in Distribution Testing* (with Gautam Kamath):
  `http://www.cs.columbia.edu/~ccanonne/workshop-focs2017/`
- Co-organized a workshop for FOCS'16: *(Some) Orthogonal Polynomials and their Applications to TCS* (with Gautam Kamath):
  `http://www.cs.columbia.edu/~ccanonne/workshop-focs2016/`
- Co-editor for the Property Testing Review Blog:
  `https://ptreview.sublinear.info`
- Co-editor for the Differential Privacy website:
  `https://differentialprivacy.org/`
- Co-organizer for the TCS+ online seminar series in theoretical computer science:
  `https://sites.google.com/site/plustcs/`
- Co-organizer for the Foundations of Data Science Virtual Talk Series, an online seminar series on the theory of data science:
  `https://sites.google.com/view/dstheory`
- External reviewer for
  - SODA '14, '15, '17, '18, '19, '20, '21; APPROX '22; RANDOM '14, '15, '18, '20, '21, '22, '24; COLT '14, '15, '16, '17, '19, '20, '21, '22, 23; MFCS '15, '20; STACS '16, '17, '18; CCC '16, '17, '22; STOC '14, '15, '17, '18, '19, '20, '21, '22, '23, '24; FOCS '15, '16, '17, '18, '19, 21, 24; ESA '17; ALT '17, '18, '20, '21, '23; PODS '18; ICALP '14, '16, '17, '18, '19, '21, '22, '24; ICML '20, '21; ISIT '18, '19, '21, '24; ISAAC '24, ITCS '18, '19, '21, '22, '25; ITC '20; NeurIPS '18, '19, '20, '21; AISTATS '19; LATIN '20; ITC' 20; SOSA '23; TQC '22; SWAT '20; FAccT '22; AJCAI '23
  - ACM Transactions on Computation Theory (TOCT), AMS Mathematical Reviews, Algorithmica, Annals of Statistics, Electronic Journal of Statistics, Entropy, Foundations and Trends in Theoretical Computer Science (FnTTCS), IEEE Journal on Selected Areas in Information Theory (IEEE JSAIT), IEEE Transactions on Information Theory (IEEE ToIT), Japanese Journal of Statistics and Data Science (JJSD), Journal of Logic and Analysis, Journal of Privacy and Confidentiality (JPC), Mathematical Statistics and Learning, Quantum, Random Structures & Algorithms (RSA), SIAM Journal on Computing (SICOMP), TheoretiCS, and Theoretical Computer Science.

[1] The École Centrale Paris is one of the 5 top-rated French *grandes écoles* (literally "grand schools"), i.e., higher education establishments outside the framework of the public universities system. Unlike public universities who accept all candidates who hold a baccalauréat, the grandes écoles select their students through competitive written and oral exams, usually undertaken after two or three years of dedicated preparatory classes (the "CPGE," or *Classes Préparatoires aux Grandes Écoles*).