



Royal Society University Research Fellow
Associate Professor
 Department of Computer Science
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Curriculum Vitae

March 2024

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Personal Information

Full Name: Igor Carboni Oliveira.

Citizenship: Brazilian.

Residence: Leamington Spa, UK.

Research Interests

Computational Complexity and its connections to **Algorithms**, **Combinatorics**, and **Logic**.

Areas of interest include computational learning theory, cryptography, computational pseudorandomness and its applications, circuit complexity, communication complexity, proof complexity, Kolmogorov complexity, and the logical foundations of complexity theory.

Employment and Education

Current Positions

Royal Society University Research Fellow

The Royal Society, United Kingdom.

Start Date: October 2019.

Associate Professor

Department of Computer Science, University of Warwick.

Start Date: October 2019.

Previous Positions

Visiting Scientist and Program Organizer (Program: “[Meta-Complexity](#)”)

Simons Institute for the Theory of Computing (UC Berkeley).

Period: January/2023 to May/2023.

Research Fellow (Program: “[Lower Bounds in Computational Complexity](#)”)

Simons Institute for the Theory of Computing (UC Berkeley).

Period: August/2018 - December/2018.

Mentored by Prof. [Ryan Williams](#).

Researcher ([Algorithms and Complexity Theory Group](#))

Department of Computer Science, University of Oxford.

Period: May/2017 - August/2019.

Hosted by Prof. [Rahul Santhanam](#).

Postdoctoral Fellow (Mathematics)

Faculty of Mathematics and Physics, Charles University in Prague.

Period: October/2015 - April/2017.

Hosted by Prof. [Jan Krajčůek](#).

Education

Ph.D. in Computer Science (Area: Theory of Computation)
Department of Computer Science, Columbia University.
Thesis: “Unconditional Lower Bounds in Complexity Theory”.
Advisors: Prof. [Rocco Servedio](#) and Prof. [Tal Malkin](#).
Date: June 2015.

Bachelor & Master of Science in Computer Science
Institute of Computing, University of Campinas, Brazil.
Thesis: “Computational Complexity and the P versus NP Problem”.
MSc Supervisor: Prof. [Arnaldo V. Moura](#) (Complexity).
UG Supervisors: Prof. [Orlando Lee](#) (Combinatorics) and Prof. [Walter A. Carnielli](#) (Logic).
Date: August 2010.

Funding and Awards

2023-2028: ERC Starting Grant 2022. **Total:** 1,486,000 EUR.

2022-2024: Royal Society Enhanced Research Expenses. **Total:** 263,000 GBP.

2021-2023: EPSRC New Horizons Research Grant (Warwick/Oxford). **Total:** 200,000 GBP.

2019-2024: Royal Society University Research Fellowship. **Total:** 773,000 GBP.

Fall/2018: Simons-Berkeley Research Fellowship.

2018: Best Paper Award at LATIN’18 (Latin American Theoretical Informatics).

2015–2016: Postdoctoral Fellowship (Institute of Mathematics, Charles University in Prague).

2013: Short-Term Fellowship at IDC FACT Center (Herzliya, Israel).

2010: IMPA Summer Scholarship, Rio de Janeiro/Brazil.

2009–2010: FAPESP Fellowship (Master of Science), São Paulo/Brazil.

2009: Brazilian Computer Society Prize (distinguished undergraduate performance).

2009: Euler Prize, Institute of Computing, Unicamp (distinguished undergraduate performance).

2007–2008: FAPESP Scholarship (undergraduate research experience).

2006: Santander-Unicamp Scholarship (exchange program at Complutense University of Madrid).

Academic Visits and Internships

- **Universitat Politècnica de Catalunya** (Barcelona).
Host: Prof. Albert Atserias – May 2018.
- **Mathematical Institute of the Czech Academy of Sciences** (Czech Republic).
Period: November 2017.

- **KTH Royal Institute of Technology** (Sweden).
Host: Prof. Jakob Nordstrom – March 2017.
- **Kurt Gödel Research Center** (Austria).
Host: Dr. Ján Pich – January 2017.
- **University of Oxford** (UK).
Host: Prof. Rahul Santhanam – April 2016.
- **The Chinese University of Hong Kong** (China).
Host: Prof. Andrej Bogdanov – October 2014.
- **University of Edinburgh** (UK).
Host: Prof. Rahul Santhanam – May 2014.
- **IDC Herzliya - FACT Center** (Israel).
Host: Prof. Alon Rosen – November, December 2013.
- **University of São Paulo** (Brazil).
Host: Prof. Yoshiharu Kohayakawa – June to August 2012.
- **IMPA – Instituto Nacional de Matemática Pura e Aplicada** (Brazil).
Period: January to February 2010.
- **Complutense University of Madrid** (Spain).
Period: September to December 2006.

Organization of Research Programs, Workshops, and Seminars

Research Program “Logical Foundations of Complexity Theory”

Isaac Newton Institute for Mathematical Sciences (University of Cambridge), 2026 (TBC).
(Application under submission/review)

Workshop “Recent Developments in Explicit Constructions”

64th IEEE Symposium on Foundations of Computer Science (FOCS), November 2023.

Research Program “Meta-Complexity”

Simons Institute for the Theory of Computing (UC Berkeley), Spring 2023.

Workshop “Lower Bounds, Learning and Average-Case Complexity”

Simons Institute for the Theory of Computing (UC Berkeley), February 2023.

Warwick-Imperial-Oxford Complexity Network

Online and Local Events. Running since December 2021.

Oxford-Warwick Complexity Meetings and Complexity Meetings

Hosted 40+ talks since June 2020.

Oxford Complexity Day

University of Oxford, UK (July, 2018).

Research Supervision

Zhenjian Lu (**Postdoc**). Funded by a Royal Society URF (August/2023 to May/2024).

Ian Mertz (**Postdoc**). Funded by a Royal Society URF (October/2022 to September/2024).

Shuichi Hirahara (**Postdoc**). Funded by an EPSRC grant (September/2022 to February/2023).
(Previous/Next Position: Associate Professor at the National Institute of Informatics, Japan.)

Zhenjian Lu (**Postdoc**). Funded by a Royal Society URF (April/2020 to March/2022).
(Next Position: Postdoc at the University of Oxford and Research Fellow at UC Berkeley.)

Jinqiao Hu (**Ph.D. Student**). Funded by a UKRI Guarantee/ERC Starting Grant (2024-2028).

Dimitrios Tsintzilidas (**Ph.D. Student**). Funded by a Chancellor's Scholarship (2023-2027).
(Jointly supervised by Christian Ikenmeyer.)

Bruno P. Cavalari (**Ph.D. Student**). Funded by a Chancellor's Scholarship (2020-2024).

Jiawei Li (**Graduate Research Intern**). Funded by a Royal Society URF (May/2023 to July/2023).

Herby Bowden (**MSc. Student**). Computer Science Master of Sciences Program (2021-2022).
(Award for best overall performance in the MSc in Computer Science.)

Jiatu Li (**Undergraduate Research Intern**). Funded by Yao Class (Tsinghua University)
(March/2022 to July/2022).
(Next Position: PhD student at MIT.)

Visitors

Noam Mazor (Tel Aviv University). May, 2024.

Rahul Santhanam (University of Oxford). December, 2023.

Hanlin Ren (University of Oxford). November-December, 2023.

Rahul Ilango (Massachusetts Institute of Technology). July, 2022.

Ian Mertz (University of Toronto). July, 2022.

Hanlin Ren (University of Oxford). April, 2022.

Levente Bodnar (University of Oxford). February, 2022.

Jan Pich (University of Oxford). September, 2021.

Lijie Chen (Massachusetts Institute of Technology). March, 2020.

Rahul Santhanam (University of Oxford). February, 2020.

Bruno Loff (University of Porto). October, 2019.

Moritz Muller (Universitat Politecnica de Catalunya). December, 2019.

Publications

- Links to all publications are available at <https://www.dcs.warwick.ac.uk/~igorcarb/>
- Online profile and citations: [\[Google Scholar\]](#)
- Authors are listed alphabetically in Theoretical Computer Science (TCS).

Remark. Conference publications are typically considered more prestigious than journal publications in **TCS**. The flagship conferences in *Computational Complexity Theory* are **CCC**, **FOCS**, and **STOC**.

Media Coverage: [\[Quanta Magazine\]](#) [\[Computational Complexity Blog I\]](#) [\[Computational Complexity Blog II\]](#) [\[Computational Complexity Blog III\]](#) [\[Simons Institute I\]](#) [\[Simons Institute II\]](#) [\[Godel's Lost Letter\]](#) [\[Oxford Inspired Research\]](#) [\[Shtetl Optimized I\]](#) [\[Shtetl Optimized II\]](#) [\[CS@Columbia\]](#)

- [42] **On the complexity of avoiding heavy elements.**
Preprint, 2024.
[Joint work with Z. Lu, H. Ren, and R. Santhanam] [57 pages]
- [41] **One-way functions and pKt complexity.**
Preprint, 2024.
[Joint work with S. Hirahara and Z. Lu] [45 pages]
- [40] **Reverse mathematics of complexity lower bounds.**
Preprint, 2024.
[Joint work with L. Chen and J. Li] [50 pages]
- [39] **Exact search-to-decision reductions for time-bounded Kolmogorov complexity.**
Preprint, 2024.
[Joint work with S. Hirahara, V. Kabanets, and Z. Lu] [59 pages]
- [38] **On the unprovability of circuit size bounds in intuitionistic S_2^1 .**
Preprint, 2024.
[Joint work with L. Chen and J. Li] [20 pages]
- [37] **Polynomial-time pseudodeterministic construction of primes.**
Symposium on Foundations of Computer Science (**FOCS**), 2023.
[Joint work with L. Chen, Z. Lu, H. Ren, and R. Santhanam] [48 pages]
- [36] **Constant-depth circuits vs. monotone circuits.**
Computational Complexity Conference (**CCC**), 2023.
[Joint work with B.P. Cavalari] [42 pages]
- [35] **Unprovability of strong complexity lower bounds in bounded arithmetic.**
Symposium on Theory of Computing (**STOC**), 2023.
[Joint work with J. Li] [81 pages]
- [34] **A duality between one-way functions and average-case symmetry of information.**
Symposium on Theory of Computing (**STOC**), 2023.
[Joint work with S. Hirahara, Z. Lu, R. Ilango, and M. Nanashima] [60 pages]

- [33] **Theory and applications of probabilistic Kolmogorov complexity.**
The Computational Complexity Column – Bulletin of EATCS No 137 (**EATCS Bulletin**), 2022.
[Joint work with Z. Lu] [33 pages]
- [32] **Probabilistic Kolmogorov complexity with applications to average-case complexity.**
Computational Complexity Conference (**CCC**), 2022.
[Joint work with H. Goldberg, V. Kabanets, and Z. Lu] [60 pages]
- [31] **Optimal coding theorems in time-bounded Kolmogorov complexity.**
International Colloquium on Automata, Languages and Programming (**ICALP**), 2022.
[Joint work with Z. Lu and M. Zimand] [35 pages]
- [30] **LEARN-uniform circuit lower bounds and provability in bounded arithmetic.**
Symposium on Foundations of Computer Science (**FOCS**), 2021.
[Joint work with M. Carmosino, V. Kabanets, and A. Kolokolova] [65 pages]
- [29] **Quantum learning algorithms imply circuit lower bounds.**
Symposium on Foundations of Computer Science (**FOCS**), 2021.
Quantum Information Processing (**QIP**), 2021.
[Joint work with S. Arunachalan, A. Grilo, T. Gur, and A. Sundaram] [73 pages]
- [28] **Majority vs. Approximate Linear Sum and average-case complexity below NC1.**
International Colloquium on Automata, Languages and Programming (**ICALP**), 2021.
[Joint work L. Chen, Z. Lu, and X. Lyu] [41 pages]
- [27] **An efficient coding theorem via probabilistic representations and its applications.**
International Colloquium on Automata, Languages and Programming (**ICALP**), 2021.
[Joint work with Z. Lu] [37 pages]
- [26] **Pseudodeterministic algorithms and the structure of probabilistic time.**
Symposium on Theory of Computing (**STOC**), 2021.
[Joint work with Z. Lu and R. Santhanam] [36 pages]
- [25] **Algorithms and lower bounds for formulas of low-communication leaf gates.**
Computational Complexity Conference (**CCC**), 2020.
ACM Trans. Comput. Theory (**ToCT**) 13(4): 23:1-23:37, 2021.
[Joint work with V. Kabanets, S. Korothe, Z. Lu, and D. Myrisiotis] [44 pages]
- [24] **NP-hardness of circuit minimization for multi-output functions.**
Computational Complexity Conference (**CCC**), 2020.
[Joint work with R. Ilango and B. Loff] [39 pages]
- [23] **Consistency of circuit lower bounds with bounded theories.**
Logical Methods in Computer Science (**LMCS**), Volume 16, Issue 2, 2020.
[Joint work with J. Bydzovsky and J. Krajicek] [17 pages]
- [22] **Beyond natural proofs: hardness magnification and locality.**
Innovations in Theoretical Computer Science (**ITCS**), 2020.
Journal of the ACM (**JACM**), 2022.
[Joint work with L. Chen, S. Hirahara, J. Pich, N. Rajgopal, and R. Santhanam] [51 pages]
- [21] **Randomness and intractability in Kolmogorov complexity.**
International Colloquium on Automata, Languages and Programming (**ICALP**), 2019.
[15 pages]

- [20] **Parity helps to compute Majority.**
Computational Complexity Conference (**CCC**), 2019.
[Joint work with R. Santhanam and S. Srinivasan] [19 pages]
- [19] **Hardness magnification near state-of-the-art lower bounds.**
Computational Complexity Conference (**CCC**), 2019.
Theory of Computing (**ToC** – CCC’19 Special Issue), 2021.
[Joint work with J. Pich and R. Santhanam] [33 pages]
- [18] **Expander-based cryptography meets natural proofs.**
Innovations in Theoretical Computer Science (**ITCS**), 2019.
Computational Complexity (**CC**) 31(1):4-1:60, 2022.
[Joint work with R. Santhanam and R. Tell] [42 pages]
- [17] **Hardness magnification for natural problems.**
Symposium on Foundations of Computer Science (**FOCS**), 2018.
[Joint work with R. Santhanam] [40 pages]
- [16] **Pseudo-derandomizing learning and approximation.**
International Workshop on Randomization and Computation (**RANDOM**), 2018.
[Joint work with R. Santhanam] [34 pages]
- [15] **NP-hardness of Minimum Circuit Size Problem for OR-AND-MOD circuits.**
Computational Complexity Conference (**CCC**), 2018.
[Joint work with S. Hirahara and R. Santhanam] [33 pages]
- [14] **On monotone circuits with local oracles and clique lower bounds.**
Chicago Journal of Theoretical Computer Science (**CJTCS**), 2018.
[Joint work with J. Krajíček] [17 pages]
- [13] **An average-case lower bound against ACC^0 .**
Latin American Theoretical Informatics Symposium (**LATIN – Best Paper Award**), 2018.
[Joint work with R. Chen and R. Santhanam] [19 pages]
- [12] **Conspiracies between learning algorithms, lower bounds, and pseudorandomness.**
Computational Complexity Conference (**CCC**), 2017.
[Joint work with R. Santhanam] [51 pages]
- [11] **Pseudodeterministic constructions in subexponential time.**
Symposium on Theory of Computing (**STOC**), 2017.
[Joint work with R. Santhanam] [30 pages]
- [10] **Addition is exponentially harder than counting for shallow monotone circuits.**
Symposium on Theory of Computing (**STOC**), 2017.
[Joint work with X. Chen and R. Servedio] [25 pages]
- [09] **Unprovability of circuit upper bounds in Cook’s theory PV.**
Logical Methods in Computer Science (**LMCS**), Volume 13, Issue 1, 2017.
[Joint work with J. Krajíček] [7 pages]
- [08] **Erdős-Ko-Rado for random hypergraphs: asymptotics and stability.**
Combinatorics, Probability and Computing (**CPC**), 26(3), 406–422, 2017
[Joint work with M. Gauy and H. Han] [15 pages]

- [07] **Near-optimal small-depth lower bounds for small distance connectivity.**
Symposium on Theory of Computing (**STOC**), 2016.
[Joint work with X. Chen, R. Servedio, and L-Y. Tan] [26 pages]
- [06] **An algebraic formulation of the graph reconstruction conjecture.**
J. Graph Theory (**JGT**), 81: 351–363, 2016.
[Joint work with B. Thatte] [12 pages]
- [05] **Learning circuits with few negations.**
International Workshop on Randomization and Computation (**RANDOM**), 2015.
[Joint work with E. Blais, C. Canonne, R. Servedio and L-Y. Tan] [16 pages]
- [04] **Majority is incompressible by $AC^0[p]$ circuits.**
Conference on Computational Complexity (**CCC**), 2015.
[Joint work with R. Santhanam] [38 pages]
- [03] **The power of negations in cryptography.**
Theory of Cryptography Conference (**TCC**), 2015.
[Joint work with S. Guo, T. Malkin, and A. Rosen] [28 pages]
- [02] **Algorithms versus circuit lower bounds.**
(Survey) Electronic Colloquium on Computational Complexity (**ECCC**), 2013.
[32 pages]
- [01] **Constructing hard functions from learning algorithms.**
Conference on Computational Complexity (**CCC**), 2013.
[Joint work with A. Klivans and P. Kothari] [23 pages]
- **Unconditional Lower Bounds in Complexity Theory.**
Ph.D. Thesis. Columbia University, 2015.
[253 pages]
- **Computational Complexity and the P vs. NP Problem** (in Portuguese).
Master’s Thesis. University of Campinas, 2010.
[125 pages]

Teaching Experience

Accreditation: Fellow of the UK Higher Education Academy (**FHEA**).

CS418/CS938 - Computational Learning Theory (Undergraduate/Masters Course).
Instructor – University of Warwick (Term 1 2022-23).

CS418/CS938 - Computational Learning Theory (Undergraduate/Masters Course).
Instructor – University of Warwick (Term 1 2021-22).

Infinitary Methods in Complexity Theory (Seminar and Reading Group).
Jointly organized with Michal Garlik – Charles University in Prague (Winter 2016).

Bounded Arithmetic and Feasible Complexity Theory (Seminar and Reading Group).

Jointly organized with Amir Tabatabai – Charles University in Prague (Summer 2016).

Logic and Complexity (Seminar and Reading Group).

Organizer – Charles University in Prague (Winter 2015).

Lower Bounds in Theoretical Computer Science (Graduate Course).

Teaching Assistant – Columbia University (Fall 2013).

Introduction to Complexity Theory (Graduate Course).

Teaching Assistant – Columbia University (Spring 2013).

Introduction to Learning Theory (Graduate Course).

Teaching Assistant – Columbia University (Fall 2012).

Foundations of Cryptography (Reading Group).

Jointly organized with Tal Malkin and Rosario Genaro – Columbia University (Fall 2011).

Introduction to Computer Programming (Undergraduate Course).

Teaching Assistant – University of Campinas (Spring 2008).

Invited Talks, Seminars, and Contributed Talks (Selected)

- Leonid Levin’s 75th Birthday Workshop (**Invited Talk**) – July 2024.
- University of Warwick, Theory Highlights Workshop (**Invited Talk**) – May 2024.
- University of Cambridge, Algorithms and Complexity Seminar (Regular Seminar) – April 2024.
- Simons Institute: Meta-Complexity Reunion Workshop (**Invited Talk**) – April 2024.
- Oberwolfach Workshop “Proof Complexity and Beyond” (**Invited Talk**) – March 2024.
- University of Birmingham, TCS Seminar (Regular Seminar) – March 2024.
- Symposium on Theoretical Aspects of Computer Science (**Invited Plenary Talk**) – March 2024.
- CIRM (France) Thematic Program - (**Invited Tutorial**) – February 2024.
- Institute of Mathematics, Czech Academy of Sciences (Regular Seminar) – October/2023.
- Symposium on Theory of Computing (Conference Talk) – Orlando – June/2023.
- Logic Colloquium, Association for Symbolic Logic (**Invited Plenary Talk**) – June 2023.
- Simons Institute: Proof Complexity and Meta-Mathematics Workshop (**Invited Talk**) – March 2023.
- Dagstuhl Workshop: Computational Complexity of Discrete Problems (**Invited Talk**) – March 2023.
- Simons Institute: Meta-Complexity Boot Camp (**Invited Talk**) – January 2023.

- Edinburgh ICMS Workshop “Mathematical Approaches to Lower Bounds” (**Invited Talk**) – July/2022.
- Workshop “Complexity Theory with a Human Face III” (**Invited Talk**) – July/2022.
- Warwick-Imperial-Oxford Complexity Network (Tutorial) – May 2022.
- Rutgers DIMACS “Meta-Complexity, Barriers, and Derandomization” (**Invited Talk**) – April/2022.
- MIT Algorithms and Complexity Seminar (Regular Seminar) – March/2022.
- Symposium on Foundations of Computer Science (Conference Talk) – Online – Feb/2022.
- International Colloquium on Automata, Languages and Programming (Conference Talk) – July/2021.
- Dagstuhl Workshop: Computational Complexity of Discrete Problems (**Invited Talk**) – March/2021.
- Durham ACiD Seminar (Online Seminar) – March/2021.
- LMS Computer Science Colloquium (**Invited Plenary Talk**) – November/2020.
- Workshop “Complexity Theory with a Human Face I” (**Invited Talk**) – September/2020.
- Seminários online de Grafos, Algoritmos e Combinatória (Online Seminar) – September/2020.
- STOC’20 Workshop: MCSP and Hardness Magnification (**Invited Talk**) – June/2020.
- University of Birmingham, TCS Seminar (Regular Seminar) – February/2020.
- Banff (BIRS) Institute: Proof Complexity Workshop (**Invited Talk**) – January/2020.
- Simons Institute: Lower Bounds Reunion Workshop (**Invited Talk**) – December/2019.
- Computational Complexity Conference (Conference Talk) – Rutgers University – July/2019.
- International Colloquium on Automata, Languages and Programming (Conference Talk) – July/2019.
- DIMAP/Warwick Workshop (Contributed Talk) – May/2019.
- University of Edinburgh LFCS Seminar (Regular Seminar) – May/2019
- Dagstuhl Workshop: Computational Complexity of Discrete Problems (**Invited Talk**) – March/2019.
- Simons Institute for the Theory of Computing (Regular Seminar) – Berkeley – November/2018.
- Simons Institute for the Theory of Computing (Fellow Talk) – Berkeley – October/2018.
- Simons Institute: Workshop on Boolean Devices (**Invited Talk**) – September/2018.
- Int. Conference on Randomization and Computation (Conference Talk) – Princeton – August/2018.
- Clay Mathematics Institute Workshop on Computational Complexity (**Invited Talk**) – July/2018.

- Imperial College London, Dept. of Computing (Regular Seminar) – May/2018.
- Universitat Politècnica de Catalunya (Regular Seminar) – Barcelona – May/2018.
- Latin American Theoretical Informatics (Conference Talk) – Buenos Aires – April/2018.
- Queen Mary University of London (Regular Seminar) – December/2017.
- University of Oxford, Dept. of Computer Science (Regular Seminar) – October/2017.
- Computational Complexity Conference (Conference Talk) – Riga (Latvia) – July/2017.
- Symposium on Theory of Computing (Conference Talk) – Montreal (Canada) – June/2017.
- Institute of Computer Science at the Czech Academy of Sciences (Regular Seminar) – April/2017.
- Institute of Mathematics, Czech Academy of Sciences (Regular Seminar) – April/2017.
- Dagstuhl Workshop: Computational Complexity of Discrete Problems (**Invited Talk**) – March/2017.
- Institute of Mathematics, Czech Academy of Sciences (Regular Seminar) – March/2017.
- KTH Royal Institute of Technology (Regular Seminar) – Stockholm – March/2017.
- Charles University in Prague, Computer Science Institute (Regular Seminar) – March/2017.
- Low-Depth Complexity Workshop, St. Petersburg State University (**Invited Talk**) – May/2016.
- Simons Institute: Workshop on Algorithms and Complexity (**Invited Talk**) – October/2015.
- Computational Complexity Conference (Conference Talk) – Oregon (USA) – June/2015.
- Columbia University, Theory Seminar (Regular Seminar) – New York – May/2015.
- NYU-Poly, Theory Seminar (Regular Seminar) – New York – November/2014.
- Columbia University, Theory Seminar (Regular Seminar) – New York – October/2014.
- Dagstuhl Workshop: Optimal Algorithms and Proofs (**Invited Talk**) – October/2014.
- The Chinese University of Hong Kong, ITCSC-CSE Seminar (Regular Seminar) – October/2014.
- Princeton University, Meeting of Center for Comp. Intractability (**Invited Talk**) – February/2014.
- NYU-Poly, Theory Seminar (Regular Seminar) – New York – April/2013.
- Columbia University, Theory Seminar (Regular Seminar) – New York – February/2013.

Professional Service

PC Member:

Computational Complexity Conference (CCC) 2021
Innovations in Theoretical Computer Science (ITCS) 2022
Latin American Theoretical Informatics Symposium (LATIN) 2024

Editor:

ToC Special Issue (CCC 2021)

PhD/MSc Defense Committees:

Namrata (Warwick, PhD), 2024.
Avgerinos Delkos (Birmingham, PhD), 2024.
Marcel Dall'Agnol (Warwick, PhD), 2023.
Siddhartha Jain (EPFL, MSc), 2022.

Additional Committees:

Chair of the Grant+Fellowship Support Steering Committee (Warwick CS Department).

Review Service

Journals:

Theory of Computing (ToC).
SIAM Journal on Computing (SICOMP).
Theoretical Computer Science (TCS).
ACM Transactions on Computation Theory (TOCT).
Journal of the ACM (JACM).

Conferences:

RANDOM, COLT, ICALP, CRYPTO, CCC, STOC, MFCS, FOCS, LATA, ITCS, SODA, TCC,
LATIN.