

CONOR O'SULLIVAN

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University of Bristol, UK

RESEARCH INTERESTS

First year PhD researcher in theoretical computer science on the algorithmic theory of Big Data computation, streaming algorithms and quantum algorithms.

EDUCATION

PhD Computer Science 2024 to 2028
University of Bristol

- Supervisor: Christian Konrad.
- Ongoing project: Graph Reconstruction via Maximal Independent Set Query Algorithms.

MSci Theoretical Physics (First Class) 2020 to 2024
University of Bristol

- Masters Research Project: *Efficient Simulation of Quantum Circuits using Tensor Networks: Approximating Grover's Algorithm as a Matrix Product Operator.*
- Masters Computational Project: *Parallel Methods in Simulating Ising Model Evolution.*

PAPERS AND MANUSCRIPTS

Graph Reconstruction via MIS Queries, C. Konrad, C. O'Sullivan, V. Traistaru (2024)

- Pre-print: <https://arxiv.org/abs/2401.05845>

FUNDING AND GRANTS

PG Scholarship/Studentship: Funded by EPSRC 2024-2028
For PhD in Computer Science

University of Bristol: Funding of £1800 Jun - Aug 2023
School of Computer Science Internship in Algorithmic Theory

TEACHING EXPERIENCE

University of Bristol, School of Computer Science

- COMS20017 Algorithms and Data, Teaching Assistant 2024, 2025.
- COMS10017 Object-Oriented Programming and Algorithms, Teaching Assistant 2024, 2025.

LEADERSHIP AND VOLUNTEERING

Bristol Old Vic Theatre 2021 to 2023
Front of House Staff

University of Bristol Boat Club 2022 to 2023
Fundraiser

Bristol Philosophy Society 2021 to 2023
Treasurer

SKILLS

Python (NumPy, SciPy, Pandas, TensorFlow, Qiskit), **R**, **C/ C++**, **Julia**

REFERENCES

Dr. Christian Konrad, Senior Lecturer in Computer Science
christian.konrad@bristol.ac.uk

Dr. Tony Short, Senior Lecturer in Physics
Tony.Short@bristol.ac.uk