

JOSEPH PAUL MACMANUS

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Holywell Manor, Oxford, OX1 3UH

EDUCATION

- Exp. 2025 University of Oxford
DPhil in Mathematics
- Exp. 2021 University of Oxford
MSc in Mathematics and Foundations of Computer Science (MFoCS)
- 2020 University of Bristol
BSc in Mathematics and Computer Science, First Class Honours
Bachelor's thesis: Decision Problems within Combinatorial Group Theory.

TEACHING EXPERIENCE

- 2020 – 2020 Algorithms Teaching Assistant
Department of Computer Science, University of Bristol
- 2019 – 2020 Data Structures and Algorithms Teaching Assistant
Department of Computer Science, University of Bristol
- 2019 – 2020 Combinatorics Maths Café Leader
School of Mathematics, University of Bristol
- 2018 – 2019 GCSE and A-Level Mathematics Tutor
Metatutor Ltd.

RESEARCH EXPERIENCE

- 2019 Quantum Information Research Internship
School of Mathematics, University of Bristol

PUBLICATIONS

- [1] Alexandru, C. -M., Bridgett-Tomkinson, E., Linden, N., **MacManus, J.**, Montanaro, A., Morris, H. (2020). Quantum speedups of some general-purpose numerical optimisation algorithms. *Quantum Science and Technology*, 5(4), 045014.

SCHOLARSHIPS, GRANTS, AND PRIZES

- 2021 – 2025 Heilbronn Doctoral Partnership Scholarship
Heilbronn Institute for Mathematical Research
- 2020 Postgraduate Grant
The James Pantyfedwyn Foundation
- 2020 Graphcore Prize for Best Computer Science Student on a 3-Year Programme
Department of Computer Science, University of Bristol
- 2019 Top Student in 2nd Year Maths and Computer Science
Department of Computer Science, University of Bristol
- 2019 Undergraduate Summer Research Bursary
School of Mathematics, University of Bristol

TECHNICAL SKILLS

- Proficient programmer in Haskell, C, and Java, with experience in several other languages.
- Confident working with \LaTeX .

OTHER ACHIEVEMENTS

- 2020 – Present Associate Membership
London Mathematical Society
- 2019 – Present Technical Blog
<https://jpmacmanus.me/>
Topics written on include quantum search, combinatorics, and group theory.
- 2019 Bristol PLUS Award
Careers Service, University of Bristol