

Cameron McGarry

cmcgarry.co.uk

Employment

Research Associate, University of Sydney

May 2025–Present

- Ion trapping for quantum simulation of chemical dynamics
- Intra- and inter-university collaborations as part of diverse, multi-disciplinary team
- Computational control of experiment using Artiq
- Management of PhD and undergraduate students
- Member of university laser safety committee

Skills: Ion trapping, atomic physics, laser science, experiment design, computational experimental control, controlled quantum dynamics, Artiq, Python

Research Associate, University of Bath

Apr 2022–Apr 2024

- Designed, constructed and characterised optical devices for quantum technology
- Developed photonic quantum memory techniques
- Supervised PhD students
- Disseminated research results

Skills: Atomic physics, quantum optics, quantum photonics, optical fibre fabrication, management and supervision

Education

PhD, Imperial College London

Oct 2017–Mar 2022

- Member of Controlled Quantum Dynamics Centre for Doctoral Training
- Designed, constructed and operated free space optical experiments
- Designed and constructed a microfabricated chip trap
- Automated lab measurements in Python
- Achieved Distinction in master's year

Skills: Molecular physics, cryogenics, microfabrication, Python, Mathematica

MPhys, Corpus Christi College, The University of Oxford

2013–2017

- Master of Physics, Upper Second-Class Honours
- Specialised in laser science, photonics, quantum information and condensed matter physics

Skills: Atomic, molecular and laser physics; quantum information; condensed matter physics

Other experience

Undergraduate teaching, Imperial College London

2018–2021

- Demonstrator in courses for second year physics undergraduates in programming and radioactivity
- Development of new programming problems to complement lecture courses, this was a new program and I contributed to the development of the department's teaching strategy as part of this role

Open machine learning course, Open Data Science

2019

- Studied machine learning as part of a global cohort
- Supervised machine learning and core data science skills
- Placed in top hundred students

Skills: Python, Pandas, scikit-learn

Website developer, Oxford University Rowing Clubs

2017–2019

- Led development of a new CMS-based website as coordinator of small team
- Responsible for deployment and server maintenance

Skills: Python, Django, SQL, Apache, Linux