

Education

PhD, Imperial College London **2017–Present**

- Student in controlled quantum dynamics centre for doctoral training
 - Graded “distinction” in master’s year
 - Designing and microfabricating a chip trap for robust containment and control of cold molecules
 - Applications in quantum technology, thermodynamics and communications
- (Quantum optics, chemistry and information; laser science; microfabrication; Python; Mathematica)

MPhys, Corpus Christi College, The University of Oxford **2013–2017**

- Master of Physics, Upper Second Class Honours, integrated master’s and undergraduate degrees
 - Master’s project: use of compressed sensing in plasma wakefield accelerators
- (Atomic, molecular and laser physics; quantum information; condensed matter physics)

Research placements

Superconducting qubits, Department of Physics, University of Oxford **2016**

- Simulated and developed signal attenuator for use in experiments with superconducting qubits

Unconventional computing, YCCSA, University of York **2015**

- Research into novel forms of classical computation using nuclear magnetic resonance

Software projects

mlcourse.ai **2019**

- Open source machine learning course from Open Data Science
 - Supervised machine learning and basics of data science
- (Python, Pandas, scikit-learn)

Qiskit contributor **2019–Present**

- Contributions to IBM’s open-source toolkit for interacting with quantum processors
- (Python, quantum computing)

Oxford University Rowing Clubs Website **2017–2019**

- Began and lead development of a new CMS-based website as coordinator of small team
 - Integrated with an existing system for handling entries into rowing events
 - Also responsible for deployment and server maintenance
- (Python, Django, SQL, Apache, Linux, AWS)

Other experience

Undergraduate lab demonstrating, Imperial College London **2018–2021**

- Demonstrator in courses for second year physics undergraduates
- Python: basics of object oriented programming
- Radioactivity: teaching simulation with GEANT4

President, Corpus Christi College Boat Club **2016–2017**

- Responsibility for equipment, safety, recruitment and general running of a club
- Set out plans for long-term financial security of club by working with alumni and raising profile of club to attract potential sponsors

Treasurer, Oxford University Alternative Pickup Ice Hockey Club **2014–2015**

- Ran ice hockey sessions including collecting payment and ensuring safety
- Reduced financial deficit by approx. 80% by focusing heavily on recruitment