Philip Labrum

Dual Citizenship US & UK

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Education

HARVARD UNIVERSITY

Cambridge, MA

(Leave of Absence, Fall 2020) Expecte

Expected graduation date: December 2021

A.B. Candidate in Computer Science on the Mind Brain Behaviour track, Minor in Physics. GPA 3.5

Relevant Coursework: Machine Learning, Datasets and Algorithms, Computer Graphics, Engineering Quantum Mechanics, Statistics, Linear Algebra

HBX | HARVARD BUSINESS SCHOOL

June 2020 – August 2020

Credential of readiness in Business Analytics, Economics for Managers, and Financial Accounting.

ETON COLLEGE

Windsor, England

Awarded 11 A* at GCSE. A Level Results: Maths: A, Chemistry: A, Physics: B

September 2012 – July 2017

Winner of the Mosely prize for Physics research, Head of Theatre, House Captain, Head of the Astronomy Society.

Projects

Cognitive and Computational Neuroscience Thesis: My thesis research is on constructing reinforcement learning models based on human exploration heuristics through the Gershman Lab [2021].

Quantum Computing Collaboration: Started a joint-university project group with team-members at Harvard, MIT, EPFL, and UC Davis. We launched a virtual talk series on the applications of quantum computing. Starting with the Finance sector with guests from JP Morgan Chase, Goldman Sachs, and the MIT Faculty [2020].

Quantum Machine Learning: Using Qiskit and Pyquil we built a distance-based classifier and ran it on both IBM and Rigetti quantum computers, with the goal of comparing results across the hardware [2019].

Experience

THE CODING SCHOOL (Qubit by Qubit)

Cambridge, MA

Teaching Assistant & Curriculum Developer

September 2020 - Present

- Currently responsible for 3 lab sections in a 7500 student virtual class on Quantum Computing backed by IBM.
- Each lab section ranges from 50 400 students, with abilities ranging from high school level to graduate students.
- Created all coding and quiz assignments as well as advising on overall course direction and content during the curriculum development meetings.

SHEPHERD THERAPEUTICS

Boston, MA

Computational Research Consultant

May 2019 - August 2019

- Designed and built a Django based web-app that allowed the lab team to upload in-vitro drug results to an AWS instance and receive automated efficacy predictions from a machine learning analysis.
- Performed a mapping analysis connecting the clue.io gene expression dataset, to the Broad Institute genetic oncogene dataset. This provided a ranking highlighting the most promising drug candidates across multiple rare cancers.

RP INTERNATIONAL

London, England

Researcher

May 2018 – July 2018

- Worked in the telecommunications sector and with SaaS CRM companies to source technical specialists for international projects.
- Used CRM database analytics to identify high sector turnover rates and therefore identify future projects and clients.

Leadership and Activities

President of the Harvard Quantum Computing Association

Cambridge, MA January 2021 – Present

- Led QCA's education program, teaching introductory computer science, quantum mechanics and quantum algorithms.
- Started the QCA project initiative using resources from corporate sponsors (IBM and Rigetti).

Senior Counsellor *for Youth Lead the Change (YLC)*

Cambridge, MA January 2019 – Present

• Instructed high school students about leadership skills and social change projects over four conferences in New Delhi, India and Boston MA.

Cadet Sargent in the Combined Cadet Force (Royal Air Force)

England & Cyprus **July 2016 – July 2017**

• Trained with Princess of Wales' Royal Regiment in Dhekelia and the 34th Squadron in RAF Akrotiri. Received Gold Colonel H. Jones award for leadership.

Skills

Programming Languages: Python, C++, HTML/CSS, SQL, OCaml. **Software:** Django, Flask, Heroku, QisKit, pyQuil, Solidworks, Fusion 360.