#### Contact

www.linkedin.com/in/phil-labrum-profile (LinkedIn)

Top Skills

Deep Learning
Data Visualization
Computer Science

# Phil Labrum

Software Engineer | Machine Learning New York, New York, United States

## Summary

With over three years of work experience in machine learning, quantum computing, and education, I am passionate about creating and delivering cutting-edge courses that empower learners to master the skills and concepts of the future. My mission is to inspire and equip students, professionals, and educators with the tools and knowledge they need to succeed in the rapidly evolving fields of AI and quantum software engineering. I bring diverse perspectives and experiences to the team, having worked with leading organizations such as Google Quantum AI, IBM Quantum, Amazon Web Services, and Harvard University.

Until November 2022, I was a course developer and lead instructor at The Coding School, where I designed and taught machine learning and quantum computing courses for various audiences and partners. I created 12 machine learning lectures and ten problem sets using Pandas, PyTorch, Sci-Kit Learn, and AWS SageMaker for the AWS Train AI professional development course. I also developed and taught lessons, labs, and exercises in intensive courses on computer science and quantum software engineering for the Early Quantum Career Immersion (EQCI) program, in partnership with Google Quantum AI, IBM Quantum, Qunnect, BP, and the Unitary Fund. In both roles, I used my skills in leadership, research, and data analysis to deliver engaging and rigorous content that challenged and motivated the learners.

## Experience

The Coding School Software Engineer (Machine Learning) January 2022 - December 2022 (1 year) New York, New York, United States

• Led a team of three engineers in building a student virtual learning platform specialized in handling machine learning and quantum computing courses.

Using a Python Flask REST API and a front-end Python package built for the Jupyter Notebooks, students could submit exercises for scoring and receive grades via the Canvas learning management system

- Developed analysis and visualization tools for the Amazon Web Services (AWS) AutoGluon library using Python data science libraries (Matplotlib, SciKit-Learn, Pandas, TensorFlow)
- Machine learning subject matter expert for the Train AI and Machine Learning course on behalf of AWS, using Pandas, PyTorch, Sci-Kit Learn, and AWS SageMaker studio

Harvard University

Machine Learning Researcher | Computational and Cognitive
Neuroscience Lab

May 2021 - August 2021 (4 months)

Cambridge, Massachusetts, United States

- Used reinforcement learning models to explore human decision-making using MATLAB, Python, and Stan statistical programming Libraries
- Used a high-performance computing cluster to train Bayesian inference machine learning algorithms on human test data.

#### **IBM**

Teaching Fellow, IBM Quantum | Qubit by Qubit September 2020 - May 2021 (9 months)
Cambridge, Massachusetts, United States

• Instructed 1100 students across two labs in the Qubit by Qubit year-long introductory quantum computing course, teaching quantum mechanics, theoretical computer science, and quantum software engineering

SHEPHERD Therapeutics Software Engineering Intern May 2019 - August 2019 (4 months)

Greater Boston Area

- Helped construct the DELVE analytical platform, a full-stack web application using a Python Django backend and a PostgreSQL database, increasing the efficiency of the data pipeline between the genomics and analytics teams
- Reduced the cell line assay false-positive error rate by 15% by discovering a preprocessing data error in the gene therapy lab

RP International
Talent Acquisition Associate
May 2018 - July 2018 (3 months)
London, United Kingdom

 Recruited for specialist roles in the technology sector, and managed relationships with major technology vendors to find contractors and full-time employees.

### Education

Harvard University

Bachelor of Arts - BA, Computer Science · (2017 - 2021)

Eton College · (2012 - 2017)