# Millie McQuillin

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#### EDUCATION

## **Durham University, Computer Science BSc**

2017-2020

- Current grade: 1st Class Honours (GPA equivalent 4.0/4.0)
- Completed Modules Include: Algorithms and Data Structures | Software Methodologies | Networks & Systems

A-Level: A\*A\*A - Mathematics, Philosophy & Physics | A - AS Further Mathematics GCSE: 9A\* - Including English, Mathematics, Physics | A\* with Distinction - Level 2 Further Mathematics

#### **EXPERIENCE AND PROJECTS**

### **Durham University**, Teaching Assistant (COMP2231)

2019 - Present

· Responsible for leading students through course labs on topics ranging from Image Processing to Artificial Intelligence

#### UCLQ, Summer School in Quantum Technologies

2019 Summer

 Worked on projects throughout UCLQ research, including use of atomic magnetometers, fabrication and quantum cloud computing

## Morgan Stanley, Technology Analyst, Research

2019 Summer

- Independent Machine Learning research project to predict likelihood of trade failures (Scikit-learn, Python)
- Built a model with 98% accuracy of predicting trade failure and categorisation, as well as providing a dashboard for continuous analysis of feature importance

#### Broadcast Bionics, Software Engineer Intern

2018 Summer

• Full stack development of a site to display and review new product features (C#, 78, HTML, SQL)

#### There's no Buzz like Show Buzz, Founder,

2018 - Present

• Using NLP and unsupervised learning to develop gross analytic predictions for the entertainment industry (Python)

#### **Project Access,** Director of Innovation (Previously Head of UK)

2017 - 2019

- Coordinated successful training events across Cambridge, Oxford, Imperial & 4 other UK campuses.
- Secured funding from Cambridge University 2 years running, increased funding from 200 to 500 students and overall reach from 300 to 1000 students annually

#### Social Impact Innovation Ltd, Technical Research Consultant

2018 - 2019

• Worked with the UN to help analyse the impact of peacekeeping initiatives. Responsible for researching ways to use location specific data to analyse peacekeeping effort effectiveness in real time

## Albourne Partners, Software Engineer Intern, Portfolio & Risk

2016-2017 (1 Year)

- Developed and deployed an internal dashboard to display portfolio performance (Java, TDD, PostgreSQL)
- Developed a tool to automatically parse quarterly finance reports into a PostgreSQL database, as well as linking this with an interface, increasing upload speed for analysts by 95%

## Brown University, Pre-college Summer Program - Logic and Paradox

2015 Summer

· Selected for the advanced class, where we were taught predicate logic, as well as critical thinking skills

#### **VOLUNTEERING**

• Code First: Girls - Enabling a weekly programming course for girls at Durham University

2018 - Present

• Burgess Hill Girls - Taught 7th graders Machine Learning using Python

June 2018

#### PRESENTATIONS, PROCEEDINGS AND PAPERS

Advances in Autonomous Driving and Uncertainty in Neural Networks. Poster presentation at the Ada Lovelace Colloqium, Manchester, UK, April 17, 2019.

**E.** McQuillin, B. Pearson. Pedestrian Attention Detection in Autonomous Vehicles. Poster Presentation at OurCS, Carnegie Mellon University, USA, October 19, 2019.

(PENDING) Human Object Interaction in Musical Performance through Machine Learning. Poster Presentation at WiML Workshop, Toronto, Canada, December 9, 2019.

#### **SKILLS & INTERESTS**

**Programming Languages/Frameworks** - (proficient) Python, Java, C#, Javascript, SQL, Linux, HTML; (familiar) C, C++, R, Prolog, Haskell

**Extracurricular** - Award winning Public Speaker & Regional Debating Finalist | Durham University Academic Representative for Computer Science | Co-Founder - Durham University Women in Tech | Sport - National Netball Finalist, County Champion in 4 disciplines | Music - Grade 7+ in 3 Instruments | Languages: English (native), Spanish (conversational), Russian (beginner)

#### ACHIEVEMENTS

- Google Women Techmakers Scholar 2019 2020 | 1 of 20 (out of ~2000 applicants) awarded across EMEA for demonstrating excellence in Technology and Leadership
- Dots x Google "Rising Star" 2019 | 1 of 50 across the UK
- Catalyst Hack 2019 (1st Place) Won first prize for developing an open world game to inspire students to learn about climate science (C++)