

Laurie McClymont – Curriculum Vitae

Mobile Phone +447951694231
Email laurie.mcclymont@cern.ch

Date of Birth 25th October 1991
Nationality British

Personal Profile

- I am a physicist in the ATLAS collaboration analysing the huge amount of data produced by the Large Hadron Collider experiment in the search for new physics beyond our current understanding
- This has given me experience of analysing and understanding large data sets with computational tools within a collaborative environment and would like to apply these skills to real-world problems.
- I believe that my natural curiosity, computational skills, collaborative experience and strong mathematical problem solving background, make me well suited to a role in data science.

Research Experience

Sep 2014 - **High Energy Physics Group, University College London**
Present *PhD Candidate*

- Member of the ATLAS collaboration searching for new physics using large data sets.
- Worked within many teams, in an international collaboration of 3,000 scientists.
- Collaborated on large scale data analysis projects using Python, C++ and GitHub.
- Lead analyser measuring the efficiency of the ATLAS b-jet trigger
 - A technical measurement that is essential for many analyses within the collaboration
 - Involved detailed study and understanding of a complicated data-set
 - Measurement performed to relevant deadlines and effectively communicated to users.
- An analyser in a team searching for new physics using pairs of b-jets.
 - We use a multi-variate algorithm to identify signal and reject background.
 - I analysed the effect of the algorithm on the background.
 - I validated the fit function used to predict the background in data, by analysing the performance of the fit function performance many pseudo-data sets taken from simulation.
- Had an 18 month placement at the main CERN site in Geneva.
- Selected to present results to technical audiences; including large scientific conferences and workshops.
- Involved in public outreach explaining current research to non-physicists, including school visits.

June 2012 - **Institute of Astronomy, University of Cambridge**
Sep 2012 *Summer Research Intern*

- Spent 8 weeks during the summer analysing data from two large astronomical telescopes
- Used a statistical profile likelihood method to identify possible quasar candidates for further study.

Education

2010-14 **Merton College, University of Oxford**
MPhys Physics - 2:1 (68%)

- Courses including mathematical problem solving in a number of physical situations.
- Received a distinction in my 1st year of study.

2004-14 **Altrincham Grammar School For Boys**
A-Levels: Maths, Further Maths, Physics, History (A, A*, A*, B)*

Software Engineering Skills

- **Python** 2 years experience of use in large scale data analysis.
- **C++** 3+ years experience of use in large scale data analysis.
- **GitHub** 2+ years experience for version control in group and private analysis projects.
- **SQL** Self taught using online tutorials and private projects.
- **Python Libs** Self-taught use of data-science python libraries (pandas, numpy, seaborn, scikit-learn)
- **Misc.** Excel, LaTeX, Word, bash, linux operation system

Interests

- Badminton, Tennis, Running, Cycling, Sailing
- Travelling

- Creative Writing
- Photography
- Car Mechanics

Referees

Name	Bill Lumbergh
Company	Initech Inc.
Position	Vice President
Contact	bill@initech.com

Name	Michael "Big Mike" Tucker
Company	Burbank Buy More
Position	Store Manager
Contact	mike@buymore.com