Laurie McClymont

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Nationality British

Personal Profile

• UCL physics PhD student, currently analysing large data sets at the LHC experiment at CERN.

- Experienced in using computational tools, such as Python, to analyse and understand large data sets.
- Strong communication skills; including presenting complex information and collaborative working.

• My data analysis experience, natural curiosity and strong mathematical background make me well suited to using large data to tackle real-world problems at Rakuten Marketing.

Relevant Skills

• Computing Languages: Python (pandas, seaborn, scikit-learn), C++, bash.

Platforms: Linux, Mac OSX.

Others: Git, LaTeX, Excel, PowerPoint, Word, SQL.

Statistics Regression, hypothesis testing, error analysis, machine learning, likelihoods.
Communication Selected to present at national and international scientific conferences.

Strong team player; worked within large teams including in a leadership role.

Relevant Experience

Sep 2014 - High Energy Physics Group, University College London

Sep 2017 PhD Candidate

- Member of the ATLAS experiment searching for new physics using large data sets.
 - Worked within many diverse teams, in an international collaboration of 3,000 scientists.
 - Performed large scale data analysis projects using Python, C++ and GitHub.
 - Included an 18 month long-term attachment at the main CERN campus in Geneva.
- Lead analyser measuring the efficiency of the ATLAS b-jet trigger.
 - Performed a technical measurement and error analysis that is essential for the experiment.
 - Identified a critical problem within the data, and developed a strategy to successfully mitigate the issue.
 - Completed the measurement to deadlines and effectively communicated results to collaborators.
- Analysis contact for a team searching for new physics using pairs of b-jets.
 - Applied statistical techniques including regression, machine learning and hypothesis testing.
 - Appointed analysis contact; involved co-ordinating a team of five scientists, liaising with experts from other groups and reporting progress and plans to management.
 - Published three public results in 2016; pushing the limits of our knowledge into unexplored regions.
- Presented conclusions of data analysis to a range of audiences.
 - Routinely reported details of analysis to technical meetings in ATLAS and at UCL.
 - Selected to summarise results to large scientific audiences at international conferences and workshops.
 - Presented current research to school pupils to inspire the next generation of scientists.

June 2012 - Institute of Astronomy, University of Cambridge

Sep 2012 Summer Research Intern

- Spent eight 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.

Oct 2010 - Merton College, University of Oxford

Oct 2011 Student Access Representative

- Engaged with students from disadvantaged backgrounds to inspire and encourage applications to university.
- Led a group of students to create a prospectus, advertising the college from a student's perspective.

Education

2010-14 Merton College, University of Oxford

- MPhys Physics 2:1 (68%)
- Involved mathematical and statistical problem solving for a range of complex situations.

2004-10 Altrincham Grammar School For Boys

• A-Levels: Maths, Further Maths, Physics, History (A*, A*, A*, B).

Interests

- French Conversational level. Practice through weekly in person conversations with French natives.
- **Sports** Play regularly in a 5-a-side rugby and football team. Keen runner and cyclist.
- Travel Enjoy exploring new cities, countries and their cultures.

Referees available upon request