Laurie M^{c}Clymont

Email laurie.mcclymont@cern.ch
Mobile +447951694231
LinkedIn Laurie-McClymont

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 research experience, natural curiosity and strong mathematical background make me well suited to a role analysing Facebook's unique data-set to drive growth at the world's most exciting enterprise.

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 - Sep 2017 **High Energy Physics Group, University College London**
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 - Sep 2012 **Institute of Astronomy, University of Cambridge**
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 - Oct 2011 **Merton College, University of Oxford**
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 situations.

2004-10 **Altrincham Grammar School For Boys**

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

Interests

- **Sports** Play regularly in a local cricket and 5-a-side football team. Keen runner and cyclist.
- **French** Conversational level. Practice through weekly in person conversations with French natives for 2 years.
- **Travel** Enjoy exploring new cities and countries and their cultures.

Referees available upon request