

DR DAVID WARDROPE



I am a data scientist with thirteen years of experience of advanced statistical analysis, machine learning, algorithm creation and software development. I have worked with one of Europe's largest online retailers to apply these techniques to commercial challenges. I am a proven problem-solver and team-leader, who can communicate with diverse audiences.

EXPERIENCE

11/18 - Now

Visiting Fellow

ASOS AI, UK

Applying the latest machine learning techniques to answer real-world business questions, while carrying out research to further advance the field.

Machine Learning

Developing the first large-scale recommender system that uses hyperbolic geometry, which has been shown to better represent complex networks and hierarchically-structured data. Reductions in latency and improved product recommendations will increase customer satisfaction and sales.

01/11 - Now

Research Scientist

University College London, UK

Performing innovative particle physics research with petabyte-scale datasets from CERN's Large Hadron Collider.

Data Analysis and Modelling

Used advanced analytical and machine learning techniques to detect rare processes in large, complex datasets. Developed novel modelling techniques to obtain groundbreaking results.

Leadership

Managed a team of 30 scientists: defined research goals and priorities, administered resources, and monitored progress. Our results were 2× better than our competitors' and published 50% more frequently.

Communication

Interacted with other leaders and teams to coordinate research. Reported results at major international conferences with hundreds of participants. Published 13 scientific papers in prestigious journals.

Informing Decision Making

Performed and presented analyses to inform high-level strategic decision making, including a 300 MChf experiment upgrade project and the European master plan for particle physics over the next 20 years.

11/09 - 12/10

Research Scientist

Imperial College London, UK and CERN

Commissioning and early analysis of data from the Large Hadron Collider.

Time-Critical Analysis

Carried out non-routine, end-to-end analysis including data gathering, simulation and visualization to identify problems in data and ensure successful early experimental runs.

Algorithm Design

Optimized pattern recognition algorithms for particle reconstruction, working closely with others to improve performance for end-users.

EDUCATION & SKILLS

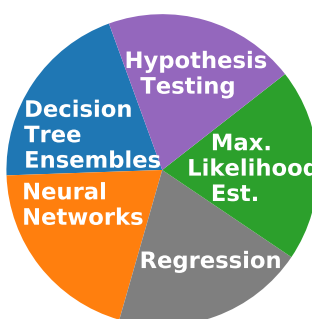
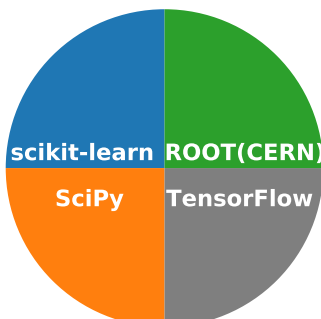
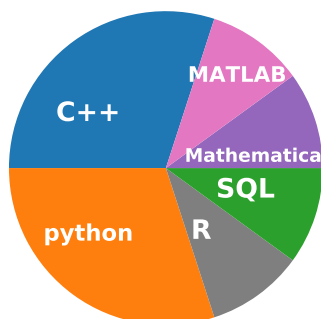
2005 - 2009 Ph.D. in Particle Physics

Imperial College London, UK and CERN

2001 - 2005 MSci (First Class Honours) Physics

Imperial College London

LANGUAGES: English, native speaker. German, Goethe B2 Zertifikat (90/100).



HOBBIES

