Cameron Grove

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EDUCATION

Durham University   Durham, UK
Doctor of Philosophy, Computational Astrophysics   *Sep. 2018 – Present*

I work on the Dark Energy Spectroscopic Instrument (DESI) project, running and analysing high resolution gravitational simulations containing billions of particles to learn more about the properties of our universe

University of Cambridge   Cambridge, UK
Master of Science, Physics, First Class Honours, Top 5% of the Cohort   *Sep. 2014 – June 2018*

EXPERIENCE

My PhD programme gives me the opportunity to undertake projects with external partners

Angstrom Sports, Senior Data Scientist   Feb. 2022 – May. 2022
London, UK

- Worked with MLB data to improve baseball game forecasting models with the aim of accurately predicting the likelihood of different outcomes.
- Refined models for assigning player skill ratings, measuring changes to the league environment, and simulating teams' in-game decisions
- Balanced considerations of model accuracy and model runtime in situations where results are extremely time-sensitive

Department for Education, Data Science Lab   Jan. 2020 – Apr. 2020
London, UK

- Developed projection models in R for pupil attainment, investigating the effects of characteristics and disadvantage on pupils' academic performance between ages 11-16
- Produced a dashboard to allow for easy exploration of the models by non-expert stakeholders
- Gained experience in working with multiple large databases containing sensitive information
- Worked in a dynamic, cutting edge, environment where I had to develop my own research questions and share my findings with a wide audience
- Considered important ethical questions in my research to ensure that the results were fair and non-discriminatory

Northumbrian Water   May 2019 – July 2019
Washington, UK

- Produced a machine learning anomaly detection system for wastewater flow in sewage treatment works, outperforming existing labour intensive methods
- Used a wide variety of time series analysis methods including LSTM neural networks and SARIMA.
- Worked effectively to deadlines in a team and presented results in a professional environment

TECHNICAL SKILLS

Languages: R, Python, C/C++, SQL
Developer Tools: Git, Docker, Jupyter, RStudio, RShiny
Expertise: Machine Learning, High Performance Computing, Data Visualisation

OTHER SKILLS

Experienced at public speaking. I have given multiple conference and seminar talks to present my research to a large audience

Capable of working remotely in large international collaborations such as the Dark Energy Spectroscopic Instrument project

Proficient in working with baseball statistics and pushing the boundaries of public sabermetric analysis. A website presenting results from my models receives hundreds to thousands of visits per day and I have been nominated for a SABR contemporary analysis award