Lawrence Arscott

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See my portfolio: https://L-Arscott.github.io

Education

MPhys Mathematical Physics (University of Edinburgh, 2017-2022)

- First Class (77%)
 - Relevant modules include Data Analysis and Visualisation, Probability and Statistics, Simulating the Physical World.
- Analytical skills, mathematical modelling
- Final year MPhys project titled Computational Group Theory (2021-2022) Result: First
 - Independent research, scientific programming

Year Abroad, Albert-Ludwigs Universität Freiburg (2019-2020)

- Experience thriving in a demanding and fast-paced environment:
 - Presentation skills: aural presentation of solutions to exercises, in German.
- Earned a C1 language certification in German.

Programming Experience:

Click <u>here</u> for Github profile

Python:

- Statistical Simulation, Molecular Dynamics, Gradient Descent
 - Masters module "Simulating the Physical World" Project: Crystallisation in 2-D HCl
- SQL, Geostatistics, GeoPandas:
 - Geostatistics project: statistical analysis of qualities of bathing locations in France.
- MIT's Quantum Machine Learning hackathon (2023):

3rd place (60 teams).

Collaborative programming challenge:

Exploring quantum computing approaches to machine learning problems as a small team.

 \mathbf{R} :

- Data Preprocessing and Analysis
 - Business analytics project: factors behind late payments. (See next page for report)
- Technical Communication: Walkthroughs of topics in statistics.
 - Personal project: combination of R code and markdown to explain methods in statistics.

MATLAB:

- Machine learning: Andrew Ng's online course (final project: film recommender).
- Masters-level programming module "Physics of Medical Imaging".

Technical Communication

Creation and maintenance of a maths website ("A Quick Note On Maths", see here)

• Contribution to university course material: one of my uploads is now part of a university course after a request by my professor.

Sample data analysis report (business analytics): please <u>click here</u>, or email for a copy.

Research Experience

Summer project in symplectic geometry (10 weeks, summer 2021)

- Awarded a £3,000 scholarship for a summer project.
- **Self-motivation**, **independent study**: developed qualities key to engaging in research.

Honours group project (2020-2021, yearlong)

Production of a 40-page report on experimental tests of general relativity as a small team.

• **Teamwork**: received praise on a well organised and executed project.

Technical Skills

- Languages: English (native), French (native), German (proficient user).
- Document structuring and editing: LaTeX (proficient user), HTML, CSS.

Work Experience

The Fludyers Hotel: a vibrant pub, restaurant and hotel in Felixstowe. (Reference available)

- Junior chef, part-time, 2022-current
- Bartender, holidays 2017-2022

Personal Achievements and Hobbies

- Boxing: Recently took part in, and won, my first amateur bout.
- Swing dancing: Enjoying twice weekly classes with the university's swing dance society.

Referees

Dr Anthony Kennedy University of Edinburgh, Physics and Astronomy 0131 650 5272 Tony.Kennedy@ed.ac.uk MPhys project supervisor

Result: First

Dr Johan Martens University of Edinburgh, Mathematics 0131 651 7759 Johan.Martens@ed.ac.uk Summer project supervisor