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 here 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.

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**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.

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**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 click here, 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) Result: First

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/web structuring and editing: **LaTeX** (proficient user), HTML, CSS.
- Data visualisation software: **Microsoft Power BI** (creation of interactive dashboards).

## 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.

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## Referees

Dr Anthony Kennedy — MPhys project supervisor
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Dr Johan Martens — Summer project supervisor
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