## **James Adams**

I'm a driven and detail-oriented career switcher with a passion for data science. With a background in biomechanics, statistical analysis and teaching, I'm looking to challenge myself while putting my data skills to good use.

London, UK james@jmablog.com jmablog.com

## Experience

#### **Associate Lecturer - Statistics and Research Methods**

2022 - Present

London Metropolitan University

- Designing and delivering lectures, practical tutorials, and assessments on statistics and research skills for first year undergraduates and Masters degree students
- · Instituted and managed a department wide switch to modern statistical applications and their delivery to students

## **Chief of Operations**

2012 - 2017

Parkour Generations

 General management of the company and Chainstore Gym & Parkour Academy facility. Responsibilities included KPI tracking, oversight of financial records and budgeting, staff management, and liaising with local councils, schools, and national governing bodies for bookings

## **Enforcements Section Team Leader**

2010 - 2012

HM Courts & Tribunals Service, Royal Courts of Justice

 Leading on the day-to-day running of the Enforcement Section of the High Court, managing seven staff, workload KPIs, and reporting regularly to Senior Civil Service management and the Judiciary

## Education

#### **Data Science**

2021 - 2022

General Assembly

· Data cleaning, exploration, modelling, and analysis in Python using NumPy, Pandas, and scikit-learn, with visualisation in matplotlib and Seaborn

### **MRes Sport & Exercise Science (Distinction)**

2020 - 2021

London Metropolitan University

· Natural Language Processing in R to determine sentimentality in qualitative interview data

### **BSc Sports Therapy (First Class Hons.)**

2017 - 2020

London Metropolitan University

- $\cdot$  Force platform data analysis with repeated-measures multi-factorial ANOVA in R
- Received Best Performance and Highest Degree Mark in Subject Group Award

#### Skills Data science

- Understanding of developing and tuning machine learning models for regression, classification, and clustering problems
- Detailed understanding of qualitative and quantitative research methodology
- Deep appreciation for statistical thinking and the importance of evidencebacked decision making
- Enthusiasm for effective, reproducible research, conveyed through concise narratives and compelling, beautiful visualisations

#### **Technical**

- · R (proficient, including Tidyverse and base R approaches, and package development)
- · Python (including Pandas, scikit-learn, Seaborn, statsmodels)
- · Web (HTML, CSS, JavaScript)
- · git

## Volunteering

## **Codebar Python Coach**

codebar.io

· Helping beginners learn Python through paired coaching and tutorials, remotely and in-person

## **Projects**

## **General Assembly Final Project: Predicting Ultra-Marathon Results**

https://github.com/jmablog/ultra-marathons-analysis

· Predicting ultra marathon finishing times using Pandas, scikit-learn, and Seaborn

## tinieR: R package

https://jmablog.github.io/tinieR

 Self-taught R language package development, providing learning on R package internals, unit testing, and continuous integration techniques

### **SquatCam**

https://squatcam.vercel.app

 $\cdot$  Real-time joint position feedback for squatting using PoseNet machine-learning algorithm inml5js

#### **Parkour Clinic**

https://parkour.clinic

 Personal non-profit project started to continue sports therapy work while studying at Masters level

# Writing and posters

#### **Journals**

## **Common Parkour Vault Techniques, Landing Styles, and Their Effects on Landing Forces**

Journal of Sports Sciences

Winner of the Human Kinetics Poster Presentation Award at BASES 2021
Conference

## Self-published

## Using the Expertise of Parkour Coaches to Understand Parkour Movement: The Kong Vault

2021

2021

DOI: 10.13140/RG.2.2.33633.02402

 Qualitative study using interviews with experienced coaches to construct a deterministic model of a movement, including natural language processing for sentiment analysis of interview texts

#### **Pandoc Filters in Bookdown**

2021

jmablog.com/post/pandoc-filters/

 Tutorial post explaining the use of Pandoc's Lua filters feature to manipulate the abstract syntax tree for post-processing of Rmarkdown documents

References available on request