

Paul Johnson

DATA SCIENTIST WITH EXPERIENCE IN HEALTHCARE, SPORTS ANALYTICS, AND SOCIAL SCIENCE

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Professional Summary

I am a data scientist based in London, currently working for the NHS South, Central and West CSU in Population Health Management. I am interested in using causal inference and machine learning to help create actionable insights and shape business decisions.

Education

University of Houston

POLITICAL SCIENCE MA

Houston, TX

2017 - 2020

University of Southampton

GLOBAL POLITICS MSc

Southampton, UK

2011 - 2012

University of Sussex

POLITICS BA HONS

Brighton, UK

2008 - 2011

Work Experience

Principal Data Scientist

Remote

NHS SOUTH, CENTRAL & WEST

2021 - Present

- Providing technical expertise in analytics and research-focused projects across the organization, including experimental and observational analysis of healthcare interventions
- Building and deploying machine learning models that forecast the daily event counts in A&E and other Urgent and Emergency Care Services
- Leading the development of organisational expertise in data science, including demonstrating and training colleagues in statistics, machine learning, and programming
- Supporting the development of the organisation's infrastructure for developing and deploying data science.

Associate BI Consultant

Remote

NHS SOUTH, CENTRAL & WEST

2021

- Led research on the wider determinants of health inequalities and the role of deprivation in health outcomes
- Supported the Population Health Management team with research design, statistical modeling, and communication and visualization of findings
- Leading the development of organisational expertise in data science, including demonstrating and training colleagues in statistics, machine learning, and programming
- Supporting the development of the organisation's infrastructure for developing and deploying data science

Graduate Research Assistant

Houston, TX

UNIVERSITY OF HOUSTON

2018 - 2020

- Built natural language processing models for research into political language in legal texts
- Supported the Population Health Management team with research design, statistical modeling, and communication and visualization of findings
- Supported the Political Party Database Project in the administering of the expert survey and maintenance of the project website

Graduate Teaching Assistant

Houston, TX

UNIVERSITY OF HOUSTON

2017 - 2019

- Courses: Intro to Comparative Politics, Mexican Politics, Comparative Elections, Media & Politics

Fundraising Manager: Product Innovation

London, UK

MARIE CURIE

2016 - 2017

- Managed Marie Curie's biggest regular fundraising campaign (Fundraising My Way)
- Assisted the development of new fundraising products and the innovation of existing campaigns

Events & Corporate Fundraiser

London, UK

WORLD CHILD CANCER

2015 - 2016

- Developed, recruited, and managed the charity's largest charity event to-date (Kilimanjaro trek) and various major events (Ride 100, Great North Run)
- Supported the Head of Corporate Fundraising in the successful corporate partnership with Deutsche Bank

Further Work Experience

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|---|--------------------------------|
| Events Coordinator FAMILY FOR EVERY CHILD | London, UK 2014 - 2015 |
| Oncology Outpatient Clerk UNIVERSITY HOSPITAL SOUTHAMPTON | Southampton, UK 2013 - 2014 |
| Income Management Assistant UNIVERSITY HOSPITAL SOUTHAMPTON | Southampton, UK 2012 - 2013 |

Skills

ANALYTICS

Statistics (Frequentist & Bayesian), Data Visualisation, Causal Inference, Machine Learning, Forecasting

PROGRAMMING

Python, R, SQL

PACKAGES

tidyverse, tidymodels, fable, lme4, brms, rstanarm, Shiny, pandas, sklearn, Optuna, spaCy, keras

TOOLS

Git, Docker, Quarto, GitHub Actions, DVC, RStudio Workbench & Connect

Publications & Selected Research

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| The Nationalization of Mexican Parties P JOHNSON & F CANTU | <i>Politica y Gobierno</i> 27 (2) 2020 |
| <ul style="list-style-type: none">Measuring the static and dynamic nationalization of Mexican parties, and the importance of national, state, and district factors in explaining the variance of the parties' electoral support. | |

Hypothesis Testing for Reliability Statistics: A Permutation Approach

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| P JOHNSON & J KIRKLAND |
| <ul style="list-style-type: none">Using a series of Monte Carlo studies to demonstrate how researchers can leverage permutation approaches to hypothesis testing for evaluating the statistical reliability of a latent scale. |

References

- Available on Request