

Professional Summary

I am a PhD educated statistician and data scientist with experience in data science consultancy and training.

I enjoy telling stories with data, working with technology, and finding data-driven solutions to challenging problems.

Experience _____

Jumping Rivers

Data Scientist Jan 2023 - Today

- Provide statistical consulting services to a broad range of clients
- Software development: contribute to production-ready R packages; unit testing; CI/CD
- · Teach statistical and programming concepts in R with best practices front and centre to academia, industry and government
- Organise the 'North East Data Scientists' meetup

NU Solve

Data Scientist (Intern)

Jan 2022 - Apr 2022

- Collaborated with NU Solve, Jumping Rivers and the Food and Agricultural Organisation (UN)
- · Developed a model-based clustering approach to diagnose the sustainability of fish populations across the world
- · Developed a bespoke R package to provide FAO with the tools to take the developed methods forward
- Provided a rapid scoping project for a large automotive manufacturer

Newcastle University

Graduate Teaching Assistant Oct 2018 - Dec 2022

- Providing one-to-one support via the university Maths-Aid service to students; queries ranging from 'How to calculate a percentage?' to 'Which test is most appropriate for my data?' and 'How to solve this differential equation?'
- · Provided maternity cover for senior tutor: triaging and delegating Maths-Aid appointments
- Delivered lectures to undergraduate students on statistical topics
- Marked coursework in a timely manner

Education

Newcastle University

PHD STATISTICS 2018 - 2023

- Thesis: Uncertainty Quantification for Stochastic Simulators with Application to Offshore Wind Farms
- Applied and developed Gaussian process based techniques to improve the efficiency of stochastic simulation experiments
- · Research themes: Bayesian methods; Decision Analysis; Bayesian Optimisation; Emulation; Gaussian Processes
- Published in a leading Statistics journal

Newcastle University

MMATHSTAT (FIRST CLASS) 2012 - 2018

- Thesis: Multivariate Statistics & Machine Learning: An Application to Product Costing in Nissan
- Studied a range of mathematical and statistical topics: regression & statistical modelling; Markov models; time series; queuing theory; extreme value theory; flexible regression

Technical & Professional Skills ____

R PROGRAMMING

• Developed production-ready R software and packages as part of a team. Confident with base R and the {tidyverse}

STATISTICS & MACHINE LEARNING

· Bayesian methods, linear and non-linear regression, Bayesian optimisation, clustering, classification, inference, prediction

COMMUNICATING

- Award-winning speaker with over 5 years teaching experience
- Produces professional, reproducible documents with R Markdown and Quarto
- · Writes technical yet accessible content and documents

SOFTWARE DEVELOPMENT

· Linux, Git, CI/CD, Command line

OTHER LANGUAGES & SOFTWARE

· LaTeX, Stan, MATLAB, SLURM

Extra Curricular & Service

Royal Statistical Society

FELLOW & VOLUNTEER 2019 - Today

- Active member of the Royal statistical society; organised a variety of in-person and online events
- · Member & Chair of the Young Statisticians Section; promoting statistical careers early-career statisticians and data scientists
- Treasurer for North Eastern Local Group

Projects & Online Activity

- Participate in #TidyTuesday data visualisation challenge; see github profile for portfolio.
- Top 5% overall contributor on Crossvalidated. As of September 2023 I have 2678 reputation and 26 badges.

Interests_

PROFESSIONAL

• Supporting early-career statisticians and data scientists, Bayesian methods, visualisation & communicating statistics, modelling, reproducibility

PERSONAL

• Cycling, hiking, running, being outside