

EDUCATION

- **PhD Computational Statistics, Compass CDT -University of Bristol** 2019-2023
 - Research interests: Time series analysis, High-Dimensional statistics, Change point analysis
 - Taught courses on topics including: Multivariate Analysis, Penalised Regression, Gaussian Processes, Optimisation, Parallel Computing
 - Industrial data science collaborations with Wessex Water (leak detection from sensor data), LVGI, and more
- **BSc Mathematics with Statistics (First Class) - University of Bristol** 2016-2019

RESEARCH

- FNETS: Factor-adjusted network estimation and forecasting for high-dimensional time series [ArXiv](#) (Application to electricity spot price forecasting)
- High-Dimensional Data Segmentation in Regression Settings Permitting Heavy Tails and Temporal Dependence [ArXiv](#) (Application to equity premium forecasting)
- FNETS: An R Package for Network Analysis and Forecasting of High-Dimensional Time Series with Factor-Adjusted Vector Autoregressive Models [ArXiv](#) (Application to security volatility forecasting)
- Changepoints.jl: A Julia package for change point analysis [Julia Registry](#)
- MRes-equivalent Project: MOSUM Methods for Multiple Change Point Analysis in Causal Networks

INTERNSHIPS

- **CheckRisk - Research Intern** Bath/Bristol - Summer 2021
 - Developed GDP nowcasting method based on a non-stationary dynamic factor model, with a novel change point method, using financial and macroeconomic data.
- **Data Cubed - Data Science Intern** Bristol - Summer 2019
 - Created a reusable Rshiny app for fitting Random Forest models for use by Data Analysts.

AWARDS

- Best Poster, [Fry Statistics Conference 2021](#)

TEACHING

- Teaching Assistant, [Theory of Inference](#) , [Statistical Computing and Empirical Methods](#), [Financial Risk Management](#)

PROGRAMMING

- **Languages:** R (Package development, Parallel, OOP/Functional, Rcpp), C++, Julia, Python
- **Technologies:** Git, Linux, HPC, LaTeX

OTHER EXPERIENCE

- University of Bristol University Challenge - Team Member
- University of Bristol Film Society - Former President, Secretary, and Treasurer

PERSONAL INTERESTS

Current Affairs, Economics, and Politics; Film; Music; Sport (Running, Football)