domowens1@gmail.com https://dom-owens-uob.github.io/

# EDUCATION

# University of Bristol

Bristol

PhD Computational Statistics, Compass CDT

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
- o Industrial data science collaborations with Wessex Water, LVGI, and more

# University of Bristol

Bristol

BSc Mathematics with Statistics (First Class)

2016-2019

#### RESEARCH

- FNETS: Factor-adjusted network estimation and forecasting for high-dimensional time series ArXiv
- High-Dimensional Data Segmentation in Regression Settings Permitting Heavy Tails and Temporal Dependence ArXiv
- FNETS: An R Package for Network Analysis and Forecasting of High-Dimensional Time Series with Factor-Adjusted Vector Autoregressive Models ArXiv
- 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 Bath/Bristol

Research Intern 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. Publication to follow.

Data Cubed Bristol

Data Science Intern
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

# OTHER EXPERIENCE

# University of Bristol University Challenge

Team Member 2020

## University of Bristol Film Society

Former President, Secretary, and Treasurer

## Programming

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

#### Personal Interests

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