

### ABOUT

Postdoctoral research fellow with proven quantitative expertise. Transitioning to a career in data science and machine learning, with programming proficiency demonstrated through an independently authored data-driven application.

### EMPLOYMENT

**Research Fellow in Mathematics** 2022 – Present  
*University of Manchester*

- Working on problems in dynamical systems, number theory and probability theory.
- Invited to the Universities of Bristol and Exeter for research visits.

**EPSRC Doctoral Prize Fellow** 2021-2022  
*University of Manchester*

- Awarded a highly competitive one year research fellowship.
- Gave numerous invited seminar talks to discuss my research.
- Awarded a London Mathematical Society bursary, to supervise a summer project student.
- Completed a professional development programme: Paths to Research Leadership.

### PUBLICATIONS

Published four academic papers with leading mathematical experts. These have appeared in the journals Ergodic Theory and Dynamical Systems, Nonlinearity, Mathematika and Mathematische Zeitschrift.

### SOFTWARE (AVAILABLE ON GITHUB)

**Housing App** An interactive app for predicting house prices, built with Scikit-Learn and Plotly Dash.

### SKILLS

**Programming** Python (NumPy, Pandas, Plotly Dash, Scikit-Learn, Seaborn, Tensorflow).  
**Other Technologies** SQL, Git, GitHub (including GitHub Actions), Docker, AWS (EC2, Lambda, S3), Terraform, Linux (including Bash), LaTeX.  
**Machine Learning** Familiar with a wide range of machine learning and statistical algorithms, including (but not limited to) regression, neural networks, clustering and gradient boosting.

### EDUCATION

**PhD in Mathematics** (Fully funded by EPSRC) 2017-2021  
*University of St Andrews*

- First prize (joint) for best talk at the Edinburgh Mathematical Society Postgraduate Meeting in 2018.
- Taught several tutorial groups and received highly positive feedback on my performance.

**MMath in Mathematics** (First Class Honours with Distinction, Avg 93%) 2013-2017  
*University of York*

- Kathleen Ryan Project Prize for the best overall MMath final year project performance.
- P B Kennedy Prize for outstanding performance in the final degree examination in Mathematics.
- Annie Curry Williamson Scholarship (based on academic potential).
- Awarded funding for two summer research projects by EPSRC and the LMS.

### CERTIFICATIONS

**Machine Learning**, Stanford University, Coursera. 2023  
**Deep Learning Specialisation**, DeepLearning.AI, Coursera. 2022  
**IBM Data Science Professional Certificate**, IBM, Coursera. 2022