DR LIAM STUART

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ABOUT

Recently completed a postdoctoral research post and looking to transition into a career in data analysis/science and machine learning. Proficiency demonstrated through a self-directed data science project published on GitHub. Recently accepted into the competitive Science to Data Science (S2DS) bootcamp (runs March 3rd – April 4th 2025) to gain more practical experience.

EMPLOYMENT

Teacher of Mathematics, ELITE Tuition 2023-Present

- Currently an online mathematics tutor working with A-Level students, aiding them in their studies and furthering their academic development.

Research Fellow in Mathematics, University of St Andrews 2022-2023

- Research was focused on fractal geometry dimension theory, with a focus on hyperbolic geometry and conformal dynamics.

EDUCATION

PhD in Mathematics, University of St Andrews 2019-2022

- Invited to give several talks about my research at various seminars.
- Taught multiple tutorial groups and received many positive comments from students regarding my teaching.

MMath Mathematics, University of St Andrews 2015-2019

- Honours Average: 18.0 (Graded on a scale of 1-20).
- Appeared on Deans' List for academic excellence every year.

SKILLS

Programming	Python (Matplotlib, NumPy, Pandas, Plotly Dash, PyTorch, Scikit-Learn, Seaborn, TensorFlow), R (dplyr, ggplot2).
Machine Learning	Knowledgeable about a large range of machine learning architectures and algorithms, including regression, clustering, and gradient boosting.
Other	GitHub, Excel (Lookup Functions, Pivot Tables), LaTeX , SQL, Tableau.

SOFTWARE

Stock Price Prediction App

- An interactive app for predicting the stock price for several different stocks, built using Plotly Dash and TensorFlow. Data is obtained through web scraping, cleaned using Pandas, and then trained on multiple models built in TensorFlow. User can control what stock they would like to predict, as well as the model architecture and years of data they would like to use in training. Published on GitHub.

CERTIFICATIONS

Machine Learning, Stanford University, Coursera. 2024
Deep Learning Specialisation, DeepLearning.AI, Coursera. 2024
IBM Data Science Professional Certificate, IBM, Coursera. 2024

PUBLICATIONS

BAMS	A new perspective on the Sullivan dictionary via Assouad type dimensions and spectra (with J. M. Fraser).
Ann. Fenn. Math.	Refined horoball counting and conformal measure for Kleinian group actions (with J. M. Fraser).
Geom. Dedicata	The Assouad spectrum of Kleinian limit sets and Patterson-Sullivan measure (with J. M. Fraser).