Brendan Martin

b.martin22@imperial.ac.uk · bmartin9 · brendanmartin98 · +44 7491222938

Education

Imperial College London 2022–Current
PhD in Statistics and Machine Learning
- Research in network methods for high-dimensional time series with applications to finance and macroeconomics.
- Theoretical and methodological contributions to factor modelling, random graphs, and spectral clustering.

The University of Edinburgh 2016–2021
MPhys in Mathematical Physics, First (85%)
- Thesis: Holographic Renormalization Group for the Ising Model.
- Courses on quantum field theory, statistical physics, general relativity, algebra, and smooth manifolds.

The University of California, Berkeley 2019–2020
Year Abroad in Mathematical Physics

Experience

Imperial College London 2022–Current
Graduate Teaching Assistant
- Courses include: Introduction to Statistical Finance (MSc), Programming for Data Science (MSc), Probability for Statistics (Undergraduate), Mathematical Foundations of Machine Learning (Undergraduate).

Edinburgh Parallel Computing Centre 2021–2022
Applications Developer
- Developed a mechanism for the automatic cleaning and ingest of NHS data into a database.
- Supervised an MSc Project in machine learning for quantum tomography.

CERN Summer 2020
Research internship in particle physics

The University of Edinburgh Summer 2019
Research project on machine learning for particle physics

Publications

1. Martin, B., Cucuringu, M., Luati, A. & Passino, F. S. Factor-Driven Network Informed Restricted Vector Autoregression in *Proceedings of the 6th ACM International Conference on AI in Finance* (2025).
2. Martin, B., Passino, F. S., Cucuringu, M. & Luati, A. NIRVAR: Network Informed Restricted Vector Autoregression. *arXiv preprint arXiv:2407.13314* (2024).

Recent Invited Talks and Presentations

- 6th ACM International Conference on AI in Finance, Singapore - *Talk* November 2025
- Network Stochastic Processes and Time Series (NeST) Away Day, Oxford - *Talk* September 2025
- NBER-NSF Time Series Conference, Philadelphia - *Poster presentation* September 2024
- Virtual Time Series Seminar (VTSS) Workshop for Junior Researchers - *Talk* April 2024
- Financial Economics meets Machine Learning Conference, Rotterdam - *Poster presentation* November 2023