Adam Furlong

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Academic History _

MSc, Theoretical Physics and Mathematics MHQ56

Sept. 2024 to Aug. 2025

- National University of Ireland Maynooth
- First Class Honours (91.9%)
- Thesis: 'Kernel density estimation on Euclidean and more general metric spaces'

BSc, Theoretical Physics and Mathematics MH206

Sept. 2021 to May 2024

- National University of Ireland Maynooth
- First Class Honours (83.3%)
- Huxley Prize 2024, De Brún Prize 2024, McMahon Prize 2023, Entrance Scholar 2021

Secondary Education

Sept. 2015 to May 2021

- · Coláiste an Átha, Ireland
- · Highest Leaving Certificate results of 2021
- · Highest Junior Certificate results of 2018

Experience ____

University Tutor, National University of Ireland Maynooth

Jan. 2024 to May 2025

- Maths Support Centre
 - Providing additional support to undergraduate students to aid their maths studies. In this role, I improved my communication skills, and brushed up on some older topics.
- Physics Department
 Grading and providing feedback to assignments of a final year physics module.

Technical Skills _

Python — experience with common modules used for physics simulations: Numpy, Matplotlib, Scipy et cetera. Also have some experience with LaTex, Word, Excel, HTML.

Personal Interests _____

Speedcubing

This is the competitive speed-solving of the Rubik's cube and its variants. It is an optimisation problem that has kept me interested for many years. I have attended 13 competitions across Ireland, earning 20 podiums, including 4 at the 2022 and 2023 Irish Championships.

Mathematics and Programming

Even after earning my degrees, I dedicate much of my free time to learning. Much of the amateur mathematics I am interested in is combinatorics: the enumeration of objects with certain properties. This is a wonderful intersection of analytic and computational mathematics. Often writing a python script to evaluate the first terms gives insight on how the sequence behaves.

Chess, Poker, Running, Reading