

THOMAS MCIVER

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EDUCATION

University of Cambridge, Jesus College, BA and MSci, Department of Physics, 2.i 2016 - 2021
St Malachy's College, Belfast 2009 - 2016
A Levels: 4A* (Maths, Physics, Chemistry, Biology)
GCSEs: 8A* (including the Sciences and Further Maths), 2A
Academic Awards: Institute of Physics A level prize, CCEA award for 1st place at A level physics in Northern Ireland.

EXPERIENCE

Analyst, Global Markets, Strats Engineering Jun 2021 - Present
Goldman Sachs International *London*

- My team sits within the equity structured derivatives group. I primarily work on derivative pricing models, implementing a range of financial and stochastic mathematics.

Masters Thesis, *Learning Skew in GJS regularisation of VAEs* June 2021
Cambridge Computer Lab, Machine Learning and AI Group. Mark: 1st *Cambridge, UK*

- Project developed a novel regularisation of Variational Autoencoder models, and demonstrated state-of-the-art reconstruction performance over standard VAE frameworks.
- Main findings were developed into paper format, and accepted to ICML 2021 (INNF and ITR3 poster sessions).

Machine Learning Intern Aug - Oct 2020
Department of Applied Mathematics and Theoretical Physics, University of Cambridge *Cambridge, UK*

- Produced initial analysis of a new NHS Covid-19 dataset and prepared the raw data for modelling.
- Developed baseline models for a research project aiming to apply ML models for Covid-19 prognosis in clinical setting.

Data Science Intern Jul - Aug 2020
Intropic *London*

- Worked closely with CEO and CTO at fintech start-up within ETF modelling team on both internal projects and client queries.
- Developed a new framework for passive fund event studies which was deployed as a python module and used to update forecasting models of a core product.

EXTRA-CURRICULAR ACTIVITIES

- Held **choral scholarship** during undergraduate studies. Committed to a 5 day a week schedule and represented my university on international tours through this position.
- Was elected as **class representative** for my materials science class. This role involved liaising with senior teaching staff and communicating feedback from the year group to the faculty.
- Was the **publicity manager** for a student music society. Was responsible for organising publicity campaigns for the termly concert and recital series, which are attended by hundreds of people each term.

ADDITIONAL INTERESTS

Outside of my academic pursuits I have a passion for music and I have achieved grade 8 in two instruments. Aside from music, I am politically engaged, and enjoy reading philosophy from Plato to Popper to Piketty. In particular, I find the interplay between political decisions and economic outcomes fascinating, and I have thus found the macro impact of central bank interventions due to covid in recent months a rewarding topic to study.