# THOMAS MCIVER

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#### **EDUCATION**

University of Cambridge, Jesus College, BA and MSci, Department of Physics, 2.i St Malachy's College, Belfast

2016 - 2021 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

# Summer Analyst, Global Markets, Strat

Jun - Sept 2021

Goldman Sachs International

London

• Worked on Structured Equity Derivatives desk and completed project on pricing illiquid OTC products using **python** and ML.

# 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 performance over standard VAE frameworks.
- Main findings were developed into paper format, and accepted to ICML 2021 (INNF and ITR3 poster sessions), and under review for NeurIPS 2021.

## Machine Learning Intern

Aug - Oct 2020

Department of Applied Mathematics and Theoretical Physics, University of Cambridge

Cambridge, UK

- Developed baseline models for a research group aiming to apply ML models for Covid-19 prognosis in clinical setting.
- Produced initial analysis of a new NHS Covid-19 dataset and wrote pre-processing functions in **python** to prepare the data for modelling.

#### 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.

#### **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.