GRACE COLVERD
gb669@cam.ac.uk, +44 7730887757

ACADEMIC EXPERIENCE

University of Cambridge, Fitzwilliam College
PhD: Dept of Engineering**:** A machine learning approach to improving retrofit planning in the UK.

MRes: Applications of Artificial Intelligence to Environmental Risk   **Distinction**
- <u>Masters thesis</u>: A Deep Learning Approach to Post-Hurricane Automatic Damage Classification: *trained convolutional neural network to automatically assess damage classification via satellite data, and generated prioritisation maps to be used by aid agencies*

<u>Awards</u>
- Fitzwilliam Senior Scholarship for academic achievement
- Fitzwilliam Graduate Tutors Prize for academic achievement

University of Oxford, The Queen's College
MPhysPhil, BSc-Masters in Physics and Philosophy   **First Class**
- <u>Masters Thesis:</u> Gauge Theories, Polytopes and Hilbert Series. *Calculated the volume of Sasaki-Einstein manifolds of 2 interior point polytopes using AdS/CFT correspondence*

<u>Awards</u>
- The John Thresher Prize for best master's project in Particle and Nuclear Physics
- The Queen's College Junior Scholarship for academic achievement
- The Queen's College Exhibition Scholarship for academic achievement

Publications
- **Quiver Gauge Theories: Beyond Reflexivity**, *Journal of High Energy Physics, Volume 2020, Article number: 161 (2020)*

PROFESSIONAL EXPERIENCE

Eion Carbon   **1yrs+**
Consulting data scientist
- Data-driven analysis to support MRV of Eion's enhanced weathering product for agriculture - simulating sampling of fields and creating methods to verify rock application
- Leakage analysis on river network and ocean modelling to understand downstream effects of enhanced weathering process
- Built web application to visualise the downstream effects of rock application - downstream.eioncarbon.com

Mastercard London
Associate Managing Consultant   **2 yrs**
- Managing multiple teams across geographies to deliver analytical consulting projects, with a focus on embedding testing culture and data-based decision making at large consumer-facing businesses across Europe
- Working with senior stakeholders to define long term testing goals, and then supporting implementation
- Charity lead - partnering with youth social mobility charity Envision to deliver mentoring to local children

Applied Predictive Technologies   **1.5 yrs**
Business Consultant
- Analysed client business experiments using SQL, Python, combining technical skills with business understanding to generate actionable recommendations for clients

Skills: Python, SQL, AWS, Streamlit, Django, Microsoft Suite