

## Benjamin Threader

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### Education

<b>University College London</b>	2021-2022
• MSc Computer Science	
<b>Lancaster University Management School</b>	2017-2021
• BBA Management: 1 <sup>st</sup> Class; Economics, Operations Research, Strategy	
<b>Aylesbury Grammar School</b>	2010-2017
• A Levels: French A, Geography A, History B	

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### Work Experience

**Vanalstynes - Premium Optical Lens Manufacturer** Jun 2020 - Aug 2020

*Finance & Data Intern - Reporting Directly to the Board of Directors*

- Developed and deployed an analytics dashboard web application for the board of directors and sales team using Python and Heroku; strategic evaluation of the customer and product portfolio in terms of bottom-line impact and growth potential, enhanced with a combination of un-supervised machine learning and rule-based algorithms
- Continuous delivery of the dashboard, adjusting to feedback from stakeholders, integrating new features such as tabs, range sliders, graph cross-filtering and csv exports
- Built forecasting model using exponential smoothing; decomposed time series into a seasonal and level component, used by Finance for budgeting and Operations for production planning

**Volkswagen Group UK** Jun 2019 - Jun 2020

*Commercial Executive - Product & Sales Planning Department, SEAT UK*

- Worked with Head of Supply to create EU CO<sub>2</sub> fine financial model which simulated moving mix through different models, derivatives, and sub-channels to minimise fines; recommended and executed several de-listings and price increases
- Created market analysis dashboard for product managers displaying activity in competitor baskets concerning pricing, volume, specification, and channel strategy; used to update product offerings and develop factory propositions for new models and derivatives
- Worked with account managers from three separate design agencies in three different countries to create and update product marketing materials; instituted Kanban boards to improve coordination

**Booker Group - UK's Largest Food Wholesaler** Sep 2018 - Sep 2018

*Summer Intern*

- Rotation through all major categories, private label development, channel strategy

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### Personal Projects

- Credit Risk Prediction: feature selection and cross-validation of different machine learning models to predict the probability of customer default, consequent selection of decision thresholds for customer classification given a set of goals for the bank providing the credit
- Index Reversion GARCH: modified the reversion term of a deterministic volatility forecasting model used widely in the financial industry to include the 30-day rolling variance average of a given equity index; creation of a new model using maximum likelihood estimation and improvement in results

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### Extra-Curricular Activities

**Lancaster University Ghosal Investment Fund** Sep 2020 - July 2021

*Head of Quantitative Team*

- Responsible for balancing the fund's equity portfolio and forecasting risk
- Backtested a variety of strategies such as minimum semi-variance for portfolio balancing and GARCH for volatility forecasting, operationalised the optimal strategies using the Google Cloud Platform
- Led a diverse team of graduate and undergraduate students, created sub-teams to complete specific tasks, instituted code reviews, onboarded new members to Git and finance concepts such as value at risk

**Hiking and Road Cycling**