# **Andreas Mitillos**

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## Education

MSc Mathematical Finance University of Warwick

- Relevant Modules: Stochastic Calculus (73%, 3rd), Advanced Trading Strategies (74%), C++ (Pending), Partial Differential Equations (84%), Simulation and Machine Learning (86%, 3rd), Financial Econometrics (72%), Financial Statistics (87%, 2nd)
- Dissertation (Provided and Co-Supervised by Rothko Investments): From Sequence to Signal Learning Interpretable Portfolio Rules via Transformer and Association Rule Mining
- BSc Mathematics, Operational Research, Statistics & Economics University of Warwick Sep 2021 - Jul 2024
  - Relevant Modules: Mathematical Analysis (74%), Linear Algebra (71%), Mathematical Statistics (77%), Stochastic Processes (77%), Generalised Statistical Models (67%), Professional Practice of Data Analysis (75%), Economics (66%)
  - Activities: President of Cypriot Society (2 Years), Student Subcommittee Member of Cypriots in the City

## Work Experience

#### Analyst in Analytics Team Augment Risk

Recently joined - supporting pricing and analytics through modelling and automation in Python and SQL

#### Mathematics and Further Mathematics Tutor MyTutor

- Prepared lesson plans for 225+ lessons, tailoring each one to the student's individual needs, and maintaining 4.8/5 star reviews
- Tutored A-Level and GCSE students, adapting to individual needs and motivating them to achieve their academic goals

#### InStep Summer Intern in Data Engineering Infosys

- Trained a logistic regression credit fraud detection model using Scikit-Learn in Python on a transaction dataset containing 1 million observations and 10 features, performing any necessary data transformations, achieving 95% accuracy
- Developed a ReactJS SPA and a Python Flask Rest API to interact with pre-trained models using the pickle library, returning JSON results including class membership and class membership probability, enabling integration with banking software
- · Presented findings and results to non-technical stakeholders, highlighting business opportunities and regularly communicated project updates in weekly team meetings

#### **Technology Summer Intern in Voice and Search Team** Sky

- Produced 6 weekly reports explaining fluctuations of KPIs for Sky Glass' Voice Assistant using data from Looker and Tableau
- Collaborated with 8 interns in analysing Sky Glass using Jira and Confluence for Agile collaboration, focusing on NLP and machine learning models for voice activation, and proposing product enhancements such as adding on device storage
- Researched competitor strategies on people search pages across leading streaming platforms, using insights to drive the development and optimisation of Sky's own people search functionality, enhancing user engagement and content discovery

#### Summer Intern in Strategies and Transactions EY

- Performed EDA on a 2,500-record real estate dataset using Python to train a model for estate value prediction
- Developed a strategy for Cyprus' DLS to create a National Key Address Registrar using existing datasets and ground surveys, complying with EU Inspire and guided by successful executions in countries including the Netherlands
- Created a Python Image-to-Text recognition script for a bank's communication database, aiding NPL classification

#### Projects

- European Option Pricing Tool (Link) Interactive tool for pricing European options using Black-Scholes, Binomial CRR, and Monte Carlo (Naive, Antithetic Variates, Control Variates, Stratified Sampling, Importance Sampling)
- Pairs Trading Strategy Tool (Link) Backtester for cointegration-based statistical arbitrage with rolling regression
- C++ Limit Order Book CLI (Link) Command-line simulator for Market, Limit, Stop-Market, and Stop-Limit Orders
- MyStudyBro (Link) Web app with 2,000+ exercises for targeted handouts (React.js, Next.js, MySQL, Node.js) reached 50,000+ unique users and 225,000+ requests in 2024 across 25+ countries

#### **Skills & Interests**

- Programming: Python, C++, R, JavaScript (NodeJS, ReactJS, NextJS), SQL
- Volunteering: Special Olympics, Organiser of Fire Disaster Relief Fundraiser, Blood Donor
- Languages: English (Fluent), Greek (Native)
- Interests: Music (Distinction in Bouzouki Diploma), Photography (1st Place in Competition), Politics, Technology, Markets

# London, UK Jul 2023 - Aug 2023

London, UK Jul 2025 - Present

Remote, UK Nov 2021 - Jun 2025

London, UK Jun 2024 - Aug 2024

Sep 2024 - Sep 2025

Nicosia, CY Jul 2022 - Aug 2022