Andrew Andreas

Andrew.andreas0@gmail.com | Linkedin | Github | +44 07715318115

EXPERIENCE

The Blackstone Group **London, England**

Associate, Real Estate Private Equity *Oct 2021 – Present*

- Select public coverage names included: Safestore (SAFE:LON), Xior (XIOR:EBR), Shaftesbury Capital (SHC:LON), WDP (WDP:BRU) and Instone Real Estate (INSX:GER)
  - Utilized sell-side and company reporting for balance sheet and liquidity analysis as well as income statement forecasts for ongoing valuation work

EDUCATION

Imperial College London **London, England**

MSc Computing (Artificial Intelligence and Machine Learning) – Distinction *Sep 2020 – Sep 2021*

- Developed a novel machine learning framework for financial forecasting, integrating data assimilation techniques with machine learning models. This framework combined the Kalman Filter for optimal data fusion, LSTM networks to capture temporal differences and Fractal Brownian Motion (FBM) simulations. Resulted in one-step and multi-step return sequences with lower MSE vs. LSTM and FBM alone
- Modules included Deep Learning (CNN's, RNN's and Transformers), Reinforcement Learning, Probabilistic Inference (Gaussian Processes & Variational Inference) and Computational Optimization

BSc Chemical Sciences with Management – First Class Honours (75% average) *Sep 2017 – Jun 2020*

The Open University (Remote) *Oct 2019 – Jun 2020*

Mathematical Statistics (FHEQ Level 6) – 81%

SKILLS

Technical: Python (Pandas, NumPy, PyTorch, SciPy, Scikit learn), PostgreSQL, Excel

Mathematics: Linear Algebra, Calculus, Statistical Inference, Bayesian Statistics, Regression, Time Series Analysis

Financial: Discounted Cash Flow (DCF), LBO, Income Statement Modelling, Competitor Analysis

Languages: English (native), Greek (conversational proficiency)

PERSONAL PROJECTS

Quantitative Finance - Financial Return Prediction

- Built a classifier to predict if a stock's return will be positive or negative over the $t+1^{th}$ period using the AlphaVantage API and the CatBoost algorithm. Program includes a script to pull user data for user specified stock tickers over specified periods (daily / intraday) as well as basic a feature engineering script to compute return / momentum factors
- Measured performance via prediction accuracy, which for a set of real estate stocks on daily timescales, showed no predictive capabilities beyond a random walk forecast.

Education Tutorial Series - Linear Regression Notebook

- Created a notebook showing how multivariate linear regression can be implemented in NumPy using the sklearn diabetes dataset and benchmarked performance to scikit-learn's own linear regression implementation

Sports Betting / Analytics (Boxing)

- Scraped several websites using Selenium to create a database of 100+ heavyweight boxers and over 150 bouts
- Developed over 40 additional boxer and bout-specific features and utilized several models such as logistic regression and DNN's to produce prediction probabilities using an ensemble forecast

AWARDS & LEADERSHIP

- **Academic Awards:** 2x Imperial College Dean's List (2018, 2019) / Imperial Best Group Thesis (2020) / Graduated from Hill College in 2016 with Summa Cum Laude Honours (4.0 GPA) / Best Student in Texas Government (2016)
- **Sports:** Awarded full basketball scholarship to #3 ranked junior college in the USA. Received three further scholarship offers after graduating (2x NCAA D2 / NAIA), 2x National Schools Basketball Champion (U15 & U17)

INTERESTS

- **Professional:** Continuous learning and development of mathematical, statistical and artificial intelligence knowledgebase and their applications to financial markets
- **Philanthropy:** Provide mentoring to university students through SEO London. I strive to aid students from low-socioeconomic backgrounds via mentorship as they navigate their early careers