Zhaoyu (Edward) Xu

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Chapter Highbury II, 295 Holloway Road, London, N7 8HS

EDUCATION

The London School of Economics and Political Science (LSE) Houghton Street, London

Master of Science in Finance Sep. 2020 – Jun. 2021

- **Awards:** Elected as Academic Representative for this Flagship Program, Received Unconditional Offer with 6000 GBP Award

The Hong Kong Polytechnic University (PolyU) Hong Kong, China

BBA (Hons) in Financial Services, Minor in Applied Mathematics Sep. 2016 – Jun. 2020

- **GPA**: 3.66 / 4.00 (**Minor GPA in Math**: 4.00 / 4.00)
- **Awards:** Outstanding Academic Achievement Award 2019 *(Top 3 students in each major)*, Faculty of Business 2018/19 Dean's List *(Top 10% in the Faculty)*
- **Thesis:** Using Machine Learning to Forecast Future Earnings [**arXiv:2005.13995,** Forthcoming at ***Atlantic Economic Journal***]
  - Finalists of the *16th **International Atlantic Economic Society (IAES) Best Undergraduate Paper Award***
  - Presented at the *90th **International Atlantic Economic Conference***

Coursework: *Uni/Multi-Variate & Vector Calculus; Laplace & Fourier Transform; ODEs & Basic PDEs; Linear Algebra; Statistical Models & Measure Theoretic Probability; Stochastic Processes; Financial Engineering; Corporate Finance; Asset Markets*

Coursera Certificates/MOOCs: *C, C++, Algorithms, Data Structures, Computer Architecture, Operating Systems, Discrete Math, Python, Databases & SQL, Machine Learning, Natural Language Processing, Convex Optimization (edX)*

PROFESSIONAL EXPERIENCES

China Securities Co., Ltd. Beijing, CHN

Investment Banking Intern Sep. 2020 – Dec. 2020

- Actively engaged in the Sci-Tech Innovation Board IPO process of two leading semiconductor corporations focusing on the research and development of MEMS (Micro-Electro-Mechanical System) & SVAC (Security Video and Audio Coding) chips, executed onsite operational, legal, financial, KYC, AML due diligence work.
- Took the responsibility of conducting market & policy researches and composing roadshow materials on several Equity carve-out (ECO) & Refinancing Projects.

Alibaba Group Hong Kong, CHN

Business Analyst Intern - Department of Business Analytics Dec. 2019 – Jan. 2020

- Completed the differential characteristic analysis and feature extraction by dint of machine learning algorithms (PCA, Xgboost & LightGBM) for identifying the potential target customers of a current Alipay product with millions of users.
- Exerting the concepts and knowledges of Computational Advertising and Business Intelligence, continuously monitored the actual market effects of several specific publicity advertisements for this product, where statistical hypothesis (A/B testing etc.) and time series analysis are well performed for ameliorations on effectively designing the interactive user interface.

China CITIC Bank (CNCB) (Hong Kong) Investment Limited Hong Kong, CHN

Summer Intern - Department of Asset & Liability Management Jun. 2019 – Aug. 2019

- Independently developed several automated analytic programs using VBA and Python (NumPy & Pandas), which has been widely used for calculating normalized NAV and profit attribution indicators for a fund with an AUM over 250 million HKD
- Verified and refined the valuation processes using DCF Model, Jarrow-Rudd (JR) & Cox-Ross-Rubinstein (CRR) Model, Monte Carlo Pricing and other methods for more than 20 investment projects in 2018FY with a total fair value over 12 billion HKD
- Deeply engaged into the evaluation process for various products based on structured and credit derivatives (Leveraged Notes, Long form TRS, Repos etc.), enhanced understandings on several pragmatic architectures like ISDA, GMRA and Basel III.

MassMutual Financial Group Hong Kong, CHN

Analyst Intern – Asset & Risk Management Department Jul. 2017 – Aug. 2017

- Provided feasible recommendations for clients regarding portfolio allocation, risk monitoring and performance optimization using Markowitz's Modern Portfolio Theory (MPT) and the Black-Litterman Model (Bayesian Shrinkage).
- Examined macro and statistical characteristics of fixed-income, equity, and money market funds over $8 million to generate the research report on specific industries and provide benchmark analysis to the client.
- Engaged in the regular meeting of research department, where fundamental analysis of regional macroeconomic statistics and technical analysis on MA, MACD, RSI and Fisher Transformation indicators are well investigated.

ACADEMIC & CO-CURRICULAR ACTIVITIES

Economic Research Assistant – *China Europe International Business School (CEIBS)* Jun. 2020 – Oct. 2020

- Actively engaged in the whole process of data collection/cleansing/mining using web scrapers/spiders & textual analysis tools (BeautifulSoup, Requests, Scrapy)
- Collaborated with multiple scholars on several econometric & macro/urban/regional economic research projects focusing on-
  (i) The impacts of the unstable macroeconomic environment under the China-U.S. Trade War on various importing and exporting commodities from different sectors
  (ii) The synergistic and spillover effects of exhibitions/sports events on regional hotel and tourism industry

Quantitative Researcher – *LORA Technologies & PolyU Accounting and Finance Tech Lab* Jun. 2019 – Jun. 2020

- Comprehensively assessed the feasibility and suitability of a series of Machine Learning (PCA + XgBoost/LightGBM) & Deep Learning (AutoEncoder + GRU/LSTM) models on the predictions of company fundamentals (i.e., the Earnings)
- Underwent systematic training on Python, R, Blockchain & Cryptocurrency and Statistical & Machine Learning

The Mathematical & Interdisciplinary Contest in Modeling (MCM/ICM) *Meritorious Winner* Jan. 2019

- Built valuation models on environmental degradation using Entropy Weight Method combined with Dose-Response Functions
- Evaluated the validity and sensitivity of the model based on remote sensing and statistical data scraped using web crawlers
- Analyzed the model stability on finite time intervals and generalized the original model by making time-series adjustments

ADDITIONAL INFORMATION

- **Skills:** Proficient in Python, C++, VBA, MATLAB, R, Stata, TensorFlow, Tableau and Adobe Illustrator
- **Interests:** Badminton, Basketball, Table Tennis, Piano, Solving Rubik's Cube
- **Activities:** Community services session at Mei King – Home for Elderly of Hong Kong; Voluntary teaching in Mainland China