MATTHEW OLDHAM, CFA

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COMPUTATIONAL ECONOMIST

Ph.D. student with a truly unique combination of knowledge, skills, and experience. An experienced researcher with a proven track record of exceeding expectations, learning, and thinking outside the box. The flexibility and ability to analyze and research complex issues, along with the ability to effectively recommend and communicate findings, leading to ongoing career progression and a growing academic publishing record. Seeking a research role to extend my expertise and research skills, with the aim of producing novel insights, and solving complex economic puzzles by utilizing the latest data science techniques.

EDUCATION AND TRAINING

Computational Social Science Ph.D. Program

GEORGE MASON UNIVERSITY | Fairfax, VA, USA | May 2019 Completion

Master of Arts in Computational Social Science

GEORGE MASON UNIVERSITY | Fairfax, VA, USA | 2016

Bachelor in Economics with Honors

UNIVERSITY OF TASMANIA | Hobart TAS, Australia | 1995

Chartered Financial Analyst

CFA INSTITUTE | 2012

Graduate Workshop in Computational Social Science

SANTA FE INSTITUTE | Santa Fe, NM, USA | 2018

AREAS OF STRENGTH AND EXPERTISE

- Microeconomic Research
- Big Data
- Industrial Organization
- Communication

- Financial Markets
- Data & Predictive Analytics
- Simulation
- Mergers & Acquisitions
- Empirical Research
- Network Science
- Project Management
- Valuations

TECHNICAL PROFICIENCIES

- Agent-based modelling
- NetLogo
- Python

- Social Network Analysis
- F
- Tableau

- Machine Learning
- Gephi
- Microsoft Office Suite

PROFESSIONAL EXPERIENCE

George Mason University, Fairfax, VA, USA *Graduate Research Assistant and Student*

2014 to Present

Developed and executed an extensive research agenda to gain a greater understanding of how financial markets behave and to explore the dynamics driving innovation within the economy. The research goals were exceeded through the utilization of the latest agent-based modelling, network analysis, and big data/data science tools.

Key Accomplishments:

- Granted Presidential scholarship by the University provost to complete my PhD. requirements.
- Produced five peer-reviewed publication and three conference presentations.

Equity Trustees Limited, Melbourne, Australia *Investment Analyst (2008-2014)*

2006 to 2014

Performed stock analysis for assigned sectors to ensure consistency with the team's "resource based" framework. Identified "value drivers" and associated signposts, completed valuation work and modelling, and made recommendations to the investment team. Produced monthly investment performance reports and reviewed and recommended mutual funds based on extensive analysis and trends. Forged long-lasting relationships with company and industry associates while performing and presenting client reviews.

Key Accomplishments:

- Maintained a disciplined long-term, team-based approach to EQT Wholesale Flagship Fund. Awarded the "recommended rating" from Lonesec for this team approach and superior performance.
- Presented and provided recommendations to key internal stakeholders based on extensive research, analysis, and sound business acumen.

Corporate Development Analyst (2006-2008)

Performed and managed corporate merger and acquisition tasks including identifying potential acquisitions and completing financial modelling. Acted as a liaison with outside investment bankers and, legal and accounting consultants and undertook due diligence.

Ford Performance Vehicles, Melbourne, Australia Toyota Motor Corporation Australia, Melbourne, Australia

2003 to 2006 1996 to 2003

Key accomplishments included being a primary member of the Sales and Marketing SAP R3 Implementation & Enhancement Team, Sales Planning and Distribution Manager – Southern Region, District Sales Manager - New Vehicles and Network Development Consultant.

Publications

The Quest for Living Beta: Investigating the Implications of Shareholder Networks (2018). *Journal of Network Theory in Finance*, 4(2),25-46. https://doi.org/10.21314/INTF.2018.041

How Fast to Run in the Red Queen Race? (2018). *Intelligent Systems in Accounting, Finance and Management, 1-16.* http://dx.doi.org/10.1002/isaf.1419

Introducing a Multi-Asset Stock Market to Test the Power of Investor Networks (2017). *Journal of Artificial Societies and Social Simulation*, 20(4). https://doi.org/10.18564/jasss.3497

Market Fluctuations Explained by Dividends and Investor Networks (2017). *Advances in Complex Systems*, 1750007. https://doi.org/10.1142/S0219525917500072

To Big Wing, or Not to Big Wing, Now an Answer (2016). In *Autonomous Agents and Multiagent Systems* (Vol. 10002, pp. 73–89). Cham: Springer International Publishing. https://doi.org/10.1007/978-3-319-46882-2 5

CONFERENCE PRESENTATIONS

The Search for Living Beta – Utilizing Network Science to Unlock the Secrets of the Stock Market. 2nd Workshop on Statistical Physics of Financial and Economic Networks satellite at NetSci2017.

The Impact of Dividends in an Investor Network. 12th Artificial Economics Conference, 2016

Drafting Agent-based Modelling into Basketball Analytics *SpringSim*, 2019