

Theodore John Kotelawala

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Date of birth: 04th September, 1995 | Religion: Christian | Civil Status: Unmarried

Data Science & Business Analytics | Financial Economics & Financial Markets |

Mathematics & Statistics | Research

Team Player | Writing Skills | Presentation Skills | Communication Skills

Career Objectives

-To offer leadership to an organization involved in risk advisory, economics, research and data analytics-based solutions working in a team environment.

Professional Objectives

-To gain new skills and further develop my understanding of mathematical aspects of data and algorithms in a challenging decision-making environment.

-To build a learning and research career combining Mathematics, Statistics, Economics and Data Science in real-world applications and involve in academia on a part-time basis

-To pursue my PhD in the research areas of Computational Mathematics and Statistics with interests in Economics

Personal Objectives

-To ensure I contribute to the development of businesses through correct guidance in decision making, offering leadership in a professional environment and inspiring the younger generation with likewise skills and professional ambitions.

Educational Background

The University Of Colombo - Master of Financial Economics (Coursework) - Merit (2023)

Courses completed in 01st Semester

- Microeconomics - B
- Macroeconomics - B
- Public Finance and Policies - B
- Financial Accounting - B
- Financial Institutions in Sri Lanka - B
- Financial Statistics - A

Courses completed in 02nd Semester

- Econometrics and Mathematics - B
- International Finance and Financial Institutions - B
- Financial Markets - A
- Current Economic Issues - A
- Planning and Project Appraisal - B
- Management Process and Practice - B

Robert Gordon University Aberdeen, UK - Master of Science in Business Analytics (Coursework and Research) - Distinction (2022)

Courses completed in 01st Semester

-Introduction to Big Data and Data Science, Fundamentals of Data Warehousing, Data Management

Courses completed in 02nd Semester

-Business Modelling and Analytics, Statistics for Business Analytics

Courses completed in 03rd Semester

-Web Mining and Analytics, Business Intelligence Tools and Applications, Research Methods

Courses completed in 04th Semester

-MSc Research Project

The London School of Economics and Political Science (LSE)

-Bachelor of Science (Honours) Mathematics and Economics - Second Class Honours (2017)

-Diploma in Economics (2014)

Courses completed in the 03rd and final year

-Corporate Finance, Advanced Statistics - Statistical Inference, Advanced Statistics - Distribution Theory, Mathematical Economics.

Courses completed in the 02nd year

-Microeconomics, Macroeconomics, Further Calculus, Further Linear Algebra, Abstract Mathematics, Elements of Econometrics.

Courses completed in the 01st year

-Introduction to Economics, Calculus, Algebra, Statistics 1 and Statistics 2.

The Royal Institute Of Colombo

- Completed Cambridge G.C.E. Advanced Level (May/June 2013) specializing in Mathematics
- Completed Cambridge G.C.E. Ordinary Level (May/June 2012) at Royal Institute International School.

Professional Recognition

- Student Member: Associateship Level - The Society of Actuaries (SOA), USA
- Certificate Level Candidate: Chartered Institute of Management Accountants (CIMA)
- Candidate: Certificate in Capital Markets - Securities and Exchange Commission of Sri Lanka (SEC). Through this program, I am pursuing the qualification and recognition as A Registered Investment Advisor (RIA).

Employment Experience

Union Assurance PLC (<https://unionassurance.com/about-us/>) - A leading life-insurer based in Sri Lanka - (January 2018 - Present)

-Manager - Pricing and Risk, Actuarial

-Supporting the overall pricing and risk function within the Actuarial team through effective pricing and repricing strategies, monitoring of profitability and risk management. Furthermore, overlooking the system development process, in ensuring product releases and relaunches are effectively and thoroughly tested, verified and documented.

-Key Responsibilities:

-Developing and enhancing mathematical-statistical models in pricing various types of life-insurance products.

-Preparing pricing and reporting templates in testing and analyzing Value of New Business and Profitability margins, to ensure business volume growth, competitiveness and profitability when pricing and repricing new and existing products, respectively.

-Involved in profit testing exercises by way of sensitivity and assumption adjustments based on economic and non-economic parameters and different sales channel requirements.

-Creating new and recalibrating existing C++ code, in actuarial software programs, Prophet Data Conversion and Prophet Professional systems, with respect to pricing/re-pricing exercises and experience investigations.

-Modeling cash-flows, profit and loss and balance sheet components in the actuarial software program, Prophet Professional.

-Conducting mortality, lapse, portfolio and product-specific exposure and claims experience investigations, in analyzing claims exposure and experience of the company.

-Utilize advanced data analytics tools and programming languages (such as SQL, R, Python) to cleanse, preprocess and analyze data.

-Developing interactive dashboards and real-time visualizations using tools like Power BI and Tableau in viewing and analyzing various risk parameters, enabling up-to-date assumption setting and consistent risk management.

-Supporting core requirements of IFRS17 implementation, including working on and clarifying model changes in various scenario tests, data requirements and product-related queries.

-Working on requirement gathering, feasibility testing and competitor comparisons with respect to pricing and repricing new and existing products, respectively.

-Prepare comprehensive product specifications, pricing certifications, and internal documentation, detailing methodologies, processes and findings to ensure transparency. Ensure all processes comply with regulatory and organizational standards and guidelines.

-Oversee system development, including preparing test scenarios and conducting user acceptance testing. Ensure new product releases and existing product relaunches are thoroughly tested, documented and ready for deployment.

-Lead project teams, manage deadlines, reviewing colleagues' work, knowledge transfer and delegation of work to subordinates and contribution towards achieving department goals. Document and organize all project activities to ensure clarity and consistency.

-Provide expert guidance to Operations, Learning & Development, Marketing, Distribution, and Bancassurance teams. Prepare detailed product quotations and presentations to support decision-making.

-Develop proposals for direct, alternate, and bancassurance business channels. Support new partnership opportunities by providing detailed analysis and participating in strategic discussions.

Ernst and Young (https://www.ey.com/en_lk) - A multinational professional services network - (June, 2017 - January, 2018)

-Management Trainee - Transaction Advisory Services

Engaged in valuation, business modelling and M&A assignments

-Key Responsibilities:

-Developed and enhanced statistical and financial models for valuation purposes

-Worked on financial and business valuations through cost, market and discounted cash-flow approaches

-Worked on advisory assignments including buy-side and sell-side valuations, periodical equity valuation exercises and fair valuation of share buy-back proposals

-Involved in proposals and assignments relevant to review of prospective financial statements/information and equity valuations, with focus on multiple industries.

-Worked on consultation exercises including impairment testing, project feasibility studies, real-estate and property fair-value valuations and recommendations

-Worked on preparing presentations and internal documentation on a variety of valuation and business modelling exercises.

Softlogic Stockbrokers (Pvt) Ltd. (<https://softlogicstockbrokers.lk/>) - A leading stock brokerage based in Sri Lanka - (June, 2016 - October, 2016)

-Intern - Investment Research

Engaged in advisory and reporting assignments within the equity research team

-Key Responsibilities:

-Involved in performing market analysis and researching financial statements of listed corporations, particularly in companies in the manufacturing and healthcare sectors.

-Involved in developing and enhancing financial models for different listed corporations under the core research areas of the organization, in identifying the corporations of best value and providing buy/sell/hold recommendations to both, local and foreign, high net-worth and institutional investors.

-Worked on quarterly and annual equity research and valuation publications and daily, weekly and monthly corporate finance reports and capital market publications.

-Worked on preparing business and economic research reports and publications to high net-worth and institutional investors in Asia, Europe and North America.

Lecturing Experience

Dalhousie University - UCL - (January 2023 - Present)

-Visiting Lecturer - Dalhousie University

-Module - Probability and Statistics for Computer Science, for the degrees, Bachelor of Computer Science and Bachelor of Applied Computer Science

Deakin University - Lyceum Campus - (September 2023 - Present)

-Visiting Lecturer - Deakin University

-Module - Business Analytics, for the degree, Bachelor of Business

University of Central Lancashire - UCL - (October 2023 - Present)

-Visiting Lecturer - University of Central Lancashire

-Module - Business Landscape, for the degrees, BA (Hons) International Business and BA (Hons) Business and Marketing

Academic Contributions

Member of the Curriculum Development Team - Faculty of Business, Lyceum Campus, Colombo, Sri Lanka.

Publications and Communications

Title: Development of a Forecasting Model to Determine the Interest Rate in Sri Lanka - An Approach Based on the 91-Day Treasury Bill Rate

Authors: T J Kotelawala, S D Viswakula

The International Conference for Data Science 2023, December 2023, Colombo, Sri Lanka, ISSN: 3030-7163

Extra-Curricular Activities

I have continued to improve my knowledge in the subject areas of data science and analytics by way of courses and online projects. The courses that I have completed and/or enrolled in, to name a few, are;

- [1. Introduction to Algorithms - Via the MIT OpenCourseWare Platform](#)
- [2. Mathematical Thinking in Computer Science Specialization](#)
- [3. Mathematics for Machine Learning Specialization](#)
- [4. Python Specialization](#)
- [5. Programming in C Specialization](#)
- [6. Game Theory - Stanford University](#)
- [7. Game Theory II: Advanced Applications - Stanford University](#)
- [8. Data Science using R Specialization SAS Programmer Professional](#)
- [9. Machine Learning Specialization](#)
- [10. Cloud Architecture with Google Cloud Professional](#)
- [11. AWS Fundamentals Specialization](#)
- [12. SAS Visual Business Analytics Professional](#)
- [13. Financial Markets - Yale University](#)

In addition, I have worked on a variety of guided projects across [machine learning and programming concepts](#).

I have worked on courses and competition data-sets on Kaggle.

I initially worked on an introductory [Machine Learning competition](#). Further, through a mentorship programme that I was chosen for, I was able to connect with a Software Engineer specializing in Machine Learning and Neural Networks and together, took part in a competition to predict [house prices using advanced regression techniques](#). The courses, data-sets and workbooks I have worked on can be found through my profiles on [Kaggle](#) and [HackerRank](#).

International Actuarial Association (IAA) - Worldwide association of local professional actuarial associations (January, 2025 - Present)

-Member of AI Task Force primarily working across 02 work streams, namely “Research and Advancement” and “Case Studies and Tools”

ETHAX Global Ltd (<https://ethax.com/about/us/>) - A licensed and regulated digital asset investment and software development business (June, 2021 - Present)

-Actively involved in the development and testing of a newly created trading software platform, which is the world’s first non-custodial, Machine Learning, Licensed Crypto Trading Platform, allowing clients to trade from their digital asset portfolios safely and efficiently. The software provides users automated, semi-automated and manual trading options, allowing users to harness built-in Machine Learning and Artificial Intelligence capabilities in the software

-Reviewing the Software Development Plan and Functional Design Specification of the platform and providing comments and feedback to the management team and technology partner

-Testing and reviewing the automated, semi-automated and manual trading options while reviewing the conventional optimized tools provided through the software

-Testing and reviewing existing trading strategies and investigating and identifying the additional capabilities to be integrated into the software

-Working with the technology partner in ensuring the application of the required and relevant Machine Learning techniques, with respect to each cryptocurrency trading strategy which uses a library of bespoke algorithms

-Working closely with the management team in providing further input and feedback with respect to additional features and functionality to be integrated into the software

United Nations Volunteers

Note-taker:

- The Capacity development learning facility training workshop
- The Organization of Professional Associations Conference
- Consultation Session on The National Innovations Dashboard conference
- Initial consultation of The Foresight and Innovations Conference on Sustainable Human Development

British Council

- Moderator for the theme of Education, at the British Council's 1st Social Innovation Forum.
- Participant at British Council and Commonwealth Youth Exchange Council Commonwealth Changemakers programme and South Asia Regional Workshop.
- Part of the organizing committee of British Council's Commonwealth Youth Unite, a youth event held in 2013 to celebrate the Commonwealth values in lieu of the Commonwealth Heads of Government Meeting held in Colombo, Sri Lanka.

Others

- Secretary and currently Vice President - Education of Union Assurance Toast-Masters Club.
- Member of the Model United Nations at Royal Institute International School.

References can be provided upon request.

I do hereby declare that the above information is correct to the best of my knowledge.

Thanking You

Theodore John Kotelawala