

Penultimate year undergraduate student who is completing Bachelor of Chemical Engineering (Honours) and Bachelor of Commerce (Finance and Econometrics) at Monash University. Skilled in R, Python and MATLAB, and enjoys quantitative analysis using applied maths and statistics. Has great passion in finance & econometrics areas of study in a data-driven world, particularly towards financial econometrics, quantitative risk and computational statistics.

SKILLS

R Programming

Python

MATLAB

Excel VBA

EDUCATION

○ Bachelor of Chemical Engineering (Honours) and Bachelor of Commerce Monash University

02/2016 – Present

WAM: 83.508

Courses Highlight

- | | |
|---|---|
| - BFC3140 - Advanced Corporate Finance (97) | - BFC2751 - Derivatives (93) |
| - BFC2340 - Debt Markets and Fixed Income Securities (95) | - ETC3460 - Financial Econometrics (88) |
| - ETC3550 - Applied Forecasting (88) | - BFC3241 - Equity and Investment Analysis (87) |

WORK EXPERIENCE

○ Consulting Project Intern Monash Food Innovation

07/2020 – Present

Tasks

- A two-month project internship with Monash Food Innovation (MFI) to work on an innovative design project in the food & beverages industry, which aims to assist Singaporean Small to Medium Enterprises (SME) with developing an Innovation Pipeline during the COVID-19 crisis and entering the Australian food market.

○ Undergraduate Finance Tutor HD Education

04/2020 – 07/2020

Tasks

- Responsible for holding one-on-one and group tutoring for Monash University undergraduate level Finance areas of study
- Taught units include: BFC2751 - Derivatives 1, BFC3241 - Equity and Investment Analysis

○ Undergraduate Student Researcher DuluxGroup

03/2020 – 04/2020

Tasks

- Responsible for conducting an in-depth industrial research project on investigating the effect of polymer synthesis processing on the morphology of the final polymer particle, and in turn its effect on paint properties

○ Head Tutor and Teaching Notes Editor - VCE Accounting Aim Education Pty Ltd

09/2018 – Present

Tasks

- Responsible for authoring the company-exclusive teaching package for VCE Accounting, including lecture notes, practice questions and mock exams

WORK EXPERIENCE

○ VCE Maths & Accounting Tutor

Aim Education Pty Ltd

04/2016 – 09/2018

Tasks

- Responsible for holding one-on-one and group tutoring sessions to high school students to provide assistance on their coursework
- Consulting with students to ensure that the delivered contents are tailored to their best needs and targeted to their areas of weaknesses in their study

PROJECTS

Retail Forecast Project (using R) (04/2020 – 06/2020)

- Performed data visualisation to inspect the statistical features of the raw dataset.
- Employed appropriate data transformation and decomposition.
- Fitted appropriate predictive time series models, including the ETS (Exponential Smoothing) model and the ARIMA (AutoRegressive Integrated Moving Average) model.
- Evaluated the forecast accuracy measures of the fitted models by producing in-sample point forecasts.
- Produced out-of-sample point and interval forecasts of the Australian Retail Turnover (Tasmanian Takeaway Food Turnover) data.

ASX200 Portfolio Project (using R) (03/2020 – 06/2020)

- Performed quantitative analysis on ASX200 stocks and computed statistical measures (moments, CAPM alpha & beta, Sharpe Ratio) for each stock.
- Chose the best performed stocks based off quantitative analysis on one-year ex-post performance to construct a portfolio.
- Computed optimal portfolio weighting allocations through the construction of an efficient frontier.
- Documented portfolio returns and performed data visualisation to inspect the time series properties.
- Fitted financial time series modelling to the sampled portfolio returns data (CAPM, ARMA and GARCH models)
- Produced out-of-sample point and interval forecasts of the portfolio return using the best fitted model - CAPM-EGARCH(1,1)

Equity Research Project (08/2018 – 10/2018)

- Completed a comprehensive equity research report (employing fundamental analysis) on an Australian public company - Cochlear Limited (COH), conducted detailed industry analysis based on Porter's Five Forces and SWOT, as well as financial report analysis, forecasting and valuation.
- The project was scored a High Distinction and was ranked the top three research reports in the cohort.

Chemical Engineering Research Project: Ultrasound Image Auto-Segmentation - Trainable Weka Segmentation (04/2020 – 06/2020)

- Evaluated the auto-segmentation/classification performance of the Machine Learning module Trainable Weka Segmentation in ImageJ on ultrasound images employing binary classification performance metrics and ROC(Receiver Operating Characteristics) analysis (in R)
- Investigated the performance of different Machine Learning models - Random Forest and Naive Bayesian
- Proposed a generalised model training approach to the ultrasound image data and evaluated the viability of this approach

AWARDS

CFA Student Scholarship Recipient

Awarded the CFA Institute Student Scholarship, which is highly competitive and only a few places are available at Monash University

Faculty of Engineering Dean's Honours List 2017

Faculty of Engineering Dean's Honours List 2016

Monash Engineering International Undergraduate Scholarship Recipient

CERTIFICATES

GARP Financial Risk Manager (FRM) Program Part 1 Exam cleared (01/2020)

Achieved 76th - 100th percentile ('Excellent' understanding) for all four areas of study in FRM Part 1 Exam, including Foundations of Risk Management, Quantitative Analysis, Financial Market and Products, Valuation and Risk Models