

Cheeming (Lucas) Tan

DATA SCIENTIST · BUSINESS ANALYST

51, USJ 11/1G, 47620 Subang Jaya, Selangor, Malaysia

☎ (+60) 16-938-7109 | ✉ lucas.cmtan@gmail.com | 🏠 lucastan96.github.io | 📱 lucastan96 | 🌐 cheeming-tan

Summary

A recent postgraduate student of MSc Business Analytics from The University of Manchester. Ex-performance specialist experience in managing search and display ads with track records of generating 4,000 leads and 90,000 clicks for all campaigns. Key expertises include statistical modelling, operational research, and digital marketing. Well-equipped with machine learning knowledge, especially tree-based algorithm and capable in implementing data mining processes, both independently or as a member of a cross functional team.

Education

The University of Manchester

MSc BUSINESS ANALYTICS: OPERATIONAL RESEARCH AND RISK ANALYSIS

- Predicted First Class Honours

Manchester, UK

Sept 2019 - Sept 2020

Sheffield Hallam University

BSc (HONS) MARKETING MANAGEMENT

- First Class Honours

Sheffield, UK

May 2016 - May 2018

Tunku Abdul Rahman University College

BBus (HONS) MARKETING

DIPLOMA IN E-COMMERCE & MARKETING

- CGPA 3.79
- Receiver of full TARUC Merit Scholarships awarded to 10As achiever in Malaysian Certificate of Education (SPM)

Kuala Lumpur, Malaysia

May 2016 - May 2018

May 2014 - May 2016

Work Experience

Wellcome Trust

RESEARCH ANALYST

- Integrated and analysed more than 140,000 data from Wellcome Global Monitor (WGM) 2018, UNICEF, and UN to develop a holistic view of current global vaccine attitudes with aims to support the policymakers in devising effective immunisation scheme to deal with COVID-19.
- Introduced a novel approach to the research of vaccine attitudes through the implementation of robust data mining framework and advanced analytical techniques including visual-driven data exploration, clustering and machine learning algorithms.
- Successfully determined new factors associated with vaccine attitudes through well-built decision tree, random forest, and gradient boosting models with significantly high accuracy score of up to 90%.
- Identified high risk country clusters with low vaccine attitudes or coverage using k-mean clustering algorithms and proposed feasible solutions to enhance the adoption rate of COVID-19 vaccine.

Manchester, UK

May 2020 - September 2020

Gapture Malaysia Sdn Bhd

PERFORMANCE SPECIALIST

- Implemented an accumulated budgets of RM300,000 Google and Facebook ads campaign, generating over 4,000 leads and 90,000 clicks for all campaigns.
- Transformed the optimisation flow of Google search ads through development of automated negative keywords screening process which helps reduced original process time by 50%.
- Integrated analytics tools which has successfully tracked over 1,000 events and increased conversion rate by 5%.
- Build automated reporting pipeline Prepared monthly report using data mining and data visualization software to build effective feedback system and relationships with clients.
- Created and managed Facebook contents for a global oil & gas company, gaining over 500 organic page likes within 6 months.

Kuala Lumpur, MY

Aug 2018 - Aug 2019

The Inside Scoop Sdn Bhd

MARKETING INTERN

- Planned and executed 4 high-yielding marketing campaigns, e.g. generated more than 50 cake orders with an estimated total revenue of RM6,000 for Mother's Day campaign.
- Negotiated with local and China suppliers and helped company saved 37% of buying cost.
- Liaised with accounting department to resolve international transaction issues.

Kuala Lumpur, MY

Feb 2018 - May 2018

- Managed weekly promotional contents on AirAsia's website and email for Australia and New Zealand market.
- Conducted a rigorous competitor analysis on 5 different airlines along with other market researches to explore new market opportunities in Sharjah and Medina.

Projects

Dissertation: Evaluating Global Vaccine Attitudes Using Data Mining Approach

Manchester, UK

- An in-depth study on global vaccine attitudes and coverage aimed to assist policymakers in devising effective immunization scheme to cope with COVID-19.
- The research was performed through a robust data mining approach that involves data preprocessing, exploratory data analysis, clustering analysis, and predictive modeling.
- Machine learning algorithms implemented comprised of k-means, decision tree, random forest, and gradient boosting.
- Tools and packages used include Python, R, Numpy, Pandas, Scikit-Learn, MICE, Seaborn, Matplotlib, ggplot2, Tableau, and etc.

Sales Forecast for Drug Store

Manchester, UK

- Forecasted sales for a large drug store chain in Europe from a dataset consisting of 1M+ sales records and other data such as promotion through time series analysis and random forest.
- Data preprocessing was conducted on R using MICE package.
- Exploratory data analysis and predictive modelling were performed through Python with Scikit-Learn, Facebook Prophet, Seaborn, and etc.

Simulation Modelling for Massachusetts General Hospital's PATA

Manchester, UK

- Simulated patient in-and-out flows with the application of Queuing Theory and proposed solution to resolve bottleneck issues in the hospital through SIMUL8.

Performance & Efficiency Analysis for Fashion Retailer's Suppliers

Manchester, UK

- Ranked the best supplier according to their attributes through multiple-criteria decision analysis, multiple objective linear programming, and data envelopment analysis.
- Performed analysis using IDS and Excel Solver.

Travelling Santa Problem

Manchester, UK

- Optimized Santa's delivery route by minimizing reindeer weariness using random search and simulated annealing algorithms that were applied on 100K dataset consisting of gifts information such as latitude and longitude.
- Conducted on Python using packages including Scikit-learn, SciPy, Matplotlib, Seaborn, and etc.

Jelly Bean Sales Regression Analysis

Manchester, UK

- Built a marketing mix model via linear regression model in R to find the association between jelly bean sales and promotion mix.
- Implemented k-fold cross validation and assumption tests to enhance model robustness.

Optimization of Student-Project Allocation

Manchester, UK

- Optimize the allocation of student to research supervisor through the application of linear programming technique including objective and constraints formulation, and solve the problem using Excel Solver.

Extracurricular Activity

Marketing Society

Kuala Lumpur, MY

BUSINESS DIRECTOR

Dec 2017 - Mar 2018

- Led a team of 11 in organizing a beauty expo which successfully acquired 50 vendors, attracted over 9,000 walk-ins, and raised above RM16,000 for both university's student centre and Marketing Society.

Waitrose Employability Event

Sheffield, UK

TEAM LEAD

Jul 2017

- Collaborated with 2 members to perform field research and developed an effective Malaysian market expansion strategy for Sheffield Waitrose's management team.

Student Representative Council

Kuala Lumpur, MY

WELFARE OFFICER

Jun 2016 - May 2017

- Initiated 5 projects with the welfare teams and helped the university implement new policy and system that brought positive impacts to the students' welfare in overall aspects.

Skills & Tools

Programming	Python, R, SQL, SAS, VBA
Machine Learning	Pandas, Numpy, Scikit-Learn, Statsmodels
Visualization	Tableau, Matplotlib, Seaborn, ggplot2, Plotly
Web	HTML, CSS, WordPress, Beautiful Soup, Selenium, Requests
Other	GitHub, Facebook Business Manager, Google Ads, Google Analytics, Excel Solver, SIMUL8, IDS
Languages	English, Malay, Mandarin, Cantonese

Achievements

2016	TARUC President's List Award	<i>Kuala Lumpur, MY</i>
2016	TARUC Dean's List Award	<i>Kuala Lumpur, MY</i>
2016	TARUC Book Prize Award	<i>Kuala Lumpur, MY</i>
2016	iStar-Internship Program Finalist	<i>Kuala Lumpur, MY</i>