

## ARJUN SINGH

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### EDUCATION

#### SINGAPORE MANAGEMENT UNIVERSITY

Jan 2024 - Aug 2025

##### Master of IT in Business (Data Science and Analytics) [Magna Cum Laude]

- Key courses studied: Applied Statistical Analysis with R, Customer Analytics and Applications, Data Science for Business, Blockchain Technology, Geospatial Analytics, Text Analytics, Financial Market Systems and Technologies

#### UNIVERSITY OF LONDON – Singapore

##### Graduate Diploma in Management [Distinction]

Sep 2022-Aug 2023

- Key courses studied: Managerial Economics, Strategy and Game Theory.

##### BSc. (Hons.) in Data Science and Business Analytics [2:1]

Sep 2019-Aug 2022

- Key courses studied: Market Research, Applied Statistics, Advanced Statistics, Machine Learning, Management Science.

### EXPERIENCE

#### Regional SOP Performance & Demand Intern – Danone

Dec 2024 – Jun 2025

- Managed ETL workflows and analyzed sell-in, sell-out, and stock data to support AMEA supply chain planning.
- Automated Power BI dashboards and ETL workflows, boosting reporting efficiency by over 100%.
- Optimized DAX/data models, improving dashboard performance by over 70%.
- Developed time-series forecasting models that improved forecast accuracy by over 20%.
- Created Python scripts to automate ETL, enhancing data processing speed and error handling.
- Collaborated with teams across 12 BUs to align BI tools with regional business needs.

#### Graduate Teaching Assistant – Singapore Management University

Aug 2024 – Dec 2024

Graduate Teaching Assistant for IS630- Statistical Thinking for Data Science.

- Facilitated coding and statistical exercises to strengthen student analytical skills.
- Supported professor in course delivery and resolved student queries.

### PROJECTS

#### LUXASIA (Escentials) Research & Analysis

- Built a recommendation system using collaborative filtering on 100,000 transactions, improving precision by 20%.
- Applied Market Basket Analysis to uncover frequent itemsets and inform cross-sell/growth initiatives.
- Developed a churn prediction model with over 90% accuracy using Random Forest to enhance retention planning.

#### Hotel Reviews Analysis (Natural Language Processing, LLMs)

- Processed and cleaned 100K+ TripAdvisor reviews, reducing data size by 15% to improve model efficiency.
- Built a custom VADER sentiment model (85% accuracy) to identify top 10 customer pain points.
- Compared performance with RoBERTa (Hugging Face), observing a 2% drop in F1 score.

#### Stock Analyzer

- Built an interactive stock analysis platform integrating MACD, RSI, VWAP, TWAP, and FinBERT-based sentiment analysis.
- Automated forecasting pipelines (ARIMA, Monte Carlo) via Yahoo Finance API, enabling back-testing and simulation, as well as enhanced forecast accuracy.
- Developed an application enabling real-time, data-driven analysis, driving a growth of over 70% in AUM.

#### HDB Resale Price Prediction (Geospatial Analysis)

- Processed over 43000 resale transactions (2023/24), engineered spatial features via OneMap Geocoding & POI Buffers.
- Developed GWR model with  $R^2=0.962$  & RMSE of 100K and Random Forest Model with OOB  $R^2=0.903$  & RMSE of 65K.
- Delivered maps and dashboards (Local  $R^2$ , price hotspots) to explain drivers (MRT, Parks) and guide predictive accuracy vs interpretability trade-offs.

### ADDITIONAL

- Certifications:** Google Analytics Individual Qualification, Digital Marketing (HubSpot), SQL for Data Science (GreatLearning)
- Technical Skills:** Python, R, SQL, Tableau, PowerBI, Excel, Power Query, Power Automate, Microsoft Office, SAS Viya, Machine Learning, NLP, VBA, Git, Solidity, LLM, Spark, Financial Modelling
- House Head Captain-** Led house of over 200 students to victories in multiple events over a year. (2018)
- Location:** Singapore | **Work Authorization:** India [Citizen], Singapore [Require Sponsorship]