



## Ng Ee Ann

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## Professional Summary

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Out of the box thinker with a passion for learning, problem solving and overcoming challenges. A good bridge between business and technical teams, with strong business acumen, data literacy and technical skills. Ability to grasp business processes and operations through exploring and analyzing data in raw sources or warehouses. Detail oriented and strong advocate of “garbage in = garbage out”, thus data validation and quality assurance checks are always a given. Always on the lookout for ways to automate and improve existing processes to increase the speed and quality of delivery. Highly motivated and takes initiative to learn and apply new skills and knowledge. A team player who is not afraid to reach out for help and to guide others, and a believer in success through collaboration and knowledge sharing. Open to ideas and constructive criticism, constantly striving for betterment in work and personal growth.

## Experience

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Jun 2021 –  
Present

### **BI Project Lead | Data Scientist** Cognizant IT Solutions | Selangor, Malaysia

#### **Regional Sales Dashboard Product Owner**

- End-to-end design, implement, test and deploy a regional sales dashboard in QlikSense app, accessible by all levels of Sales teams across 12 markets including BUD, Sales Managers and Sales Reps. Flexible design that accounts for specific business logic in different countries' operations, allowing every sales member to monitor individual and team's sales performance within their designated territories, products and customers.
- Data Quality page to indicate % completeness and reliability of KPI numbers, providing exact breakdown of missing/incorrect data points + proposed resolution (data entry in which source systems)
- Manage and coordinate SIT and UAT phase with team members and market users, provide suggestions to markets/business on improving operations for better data collection, and liaise with data engineering teams to onboard new data points, data re-loads and propose fixes for upstream data pipeline bugs.

#### **Stakeholder Mapping Tool**

- Design and implement from scratch a tool which allows the client to identify important stakeholders within an industry in a country. The tool provides users the ability to prioritize different attributes of a stakeholder, and calculates the score and ranking of stakeholders based on their weighted contribution and influence within the industry. It also displays the network connections of the stakeholder in a network graph of nodes and edges, allowing users to identify the most important person in the center of a network, as well as how to reach a stakeholder from an existing connection within 3 degrees of separation.

Oct 2020 –  
Jun 2021

## **Consultant** Mastercard | Selangor, Malaysia

(9 mo)

Industry	Payments
Specialization	Data Analytics
Role	Consultant (Data and Analytics Division)

### **Robotic Process Automation**

- Using Python Selenium, automated a stepwise web-based workflow consisting of many repetitive inputs and clicks, and distributed the solution in an executable file to other consultants across the region, saving them hundreds of hours of manual work. The users are provided an Excel template for entering the run inputs, which is fed into a GUI with Start/Stop function and a progress bar to track completion status, as well as the ability to export and compile results into a comprehensive report.

### **Business Consulting**

- Provide recommendations to merchants on product bundles and promotional items to increase average ticket size of customer purchases and drive up sales, using market basket methodologies.  
- Provide consultation to businesses on conducting controlled test simulation of business initiatives to evaluate the potential incremental impact. Further breakdown of test performance by drivers to understand which drivers drove higher impact and which cohorts responded best to the initiative, allowing businesses to make informed decisions and finetune initiatives before rolling out at full-scale.

### **Bank Portfolio Forecasting**

- Perform forecasting of different products' profitability within a banks' portfolio, by forecasting and aggregating individual KPI components in the profitability equation. Using the projected profitability on the account level to obtain full portfolio profitability and rank tier the accounts to provide recommendations for campaign targeting of high value customers.

Dec 2018 –  
Oct 2020

## **Business Data Analyst** Mercedes Benz Malaysia | Selangor, Malaysia

(1 yr 11 mo)

Industry	Automotive
Specialization	Data Analytics
Role	Data Analyst in COE of Data and Analytics

### **Business Insights through Dashboards**

- Communicate with regional sales and marketing stakeholders to understand their business goals and KPI's, work with data engineers to pull relevant data from IT source systems into data lake and deliver automated interactive dashboards that allow business users to monitor their interested KPI's.  
- Deliver dashboard showing full overview of EV charging stations across the globe to allow infrastructure development and planning in selected regions. End-to-end process includes EV stations data gathering from web sources, transform cleanse and load into databases, and displaying with geographical heatmaps on PowerBI dashboard.  
- Create regional sales funnel dashboard showing performance of different sales stages, allowing business on regional and market level make strategic and tactical planning for sales allocations  
- Support less digitized departments automate their reporting workflows by transforming their Excels/ Word docs/PDF data and load into databases and replace manual reports with visual dashboards.  
- Created a tool to minimize datasets in PowerBI files, allowing 10x faster loading and response time of PowerBI dashboards, improving usability and maintainability.

### **Data exploration and ETL**

- Work with Data Engineering team to explore regional level data across IT source systems to create a unified data model within a data warehouse, enabling a single source of standardized data for usage across the region.  
- Build data quality dashboards to monitor daily data loads, alerting data engineering team of failures and providing confidence levels for data analytics products.

### **Market segmentation & Leads scoring**

- Perform cluster analysis (unsupervised machine learning) to segment customers according to demographics, rank tier customers for targeted marketing efforts on most valuable customers in each segment.

Feb 2018 –  
Dec 2018

## Data Analyst

2X Marketing | Selangor, Malaysia

(11 mo)

Industry	Consulting (B2B Marketing)
Specialization	Data Analytics
Role	Data Analyst

### Data manipulation, visualization and analysis

- Using MySQL database and R program to cleanse and manipulate data
- Enable marketing team to compare campaign results quickly and accurately across multiple campaigns through segmentation and visualizations in R ggPlots, replacing manual Excel data processing and reporting

### Web automation

- Using R Selenium to cleanse and enrich leads data, via web scraping from LinkedIn, ZoomInfo etc, replacing the manual task completely going forward.

Mar 2012 –  
Feb 2018

## Optimization Expert & Application Consultant

Quintiq Sdn. Bhd. | Selangor, Malaysia

(6 yrs)

Industry	Consulting (IT, Science, Engineering & Technical)
Specialization	Optimization
Role	Algorithm Expert, Software Developer/Programmer

### Optimization solutions

- Deliver optimization solutions for a range of optimization puzzles using object-oriented modelling, graph algorithm and linear programming. Help companies dealing with complex planning puzzles such as train route planning, workforce scheduling, materials allocation and resource planning in increasing efficiency and outputs, reducing costs and maximizing profits while adhering to constraints in health and safety regulations, labor laws and JIT/ASAP production rules.

### Software development

- Using the Quintiq platform to develop business essential supply chain planning applications.
- Involved in full software development life cycle, from understanding business problems and translating to software solution, to front-end UI design and back-end implementation, to testing, bug fixing and supporting UAT before Go-live. With a good understanding of product development processes and agile methodologies as well as the ability to empathize the user's pain-points in software adoption, created solutions that brings high value to businesses with seamless user-adoption.

## Skills and Tools

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Business Acumen and Story Telling skills	Communicate well with business stakeholders to understand important business KPIs, needs and pain-points. Good data-story-telling skills to present technical findings through meaningful visualizations for non-technical audience.
Problem solving skills	Able to analyze complex problems and identify simple yet effective solutions. Able to learn and adapt to any technical systems or software application by self-learning through online resources.
Cloud technology	Microsoft Azure & Databricks, AWS Data Lab & Sagemaker, Datalu
Data analytics & programming tools	Python, SQL, DAX, R, Matlab, Octave, Excel VBA, HTML. Well versed in Numpy and Pandas for data cleansing, wrangling & manipulation. Well versed in object oriented model / entity relationship model, database scripting.
Data visualization	QlikSense, PowerBI, Plotly Dash, R Shiny, Matplotlib, Seaborn, Bokeh, ggplots.
Data collection, Web scraping, RPA	Web scraping using Selenium, BeautifulSoup, API requests. Create automation for browser workflows, Excel data processing.
Machine learning, Optimization and Mathematical skills	Experienced in network graph, graph algorithm and linear programming for optimization (IBM CPLEX), statistical analysis, supervised & unsupervised machine learning.
Training and Public Speaking skills	Training instructor in Python for Data Analytics course, speaker for corporate seminars on data-related topics.

## Education

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2008 - 2011

### Monash University Malaysia Campus

Bachelor's Degree in Engineering (Mechatronic/Electromechanical) | Malaysia

Major                      Mechatronics Engineering  
Grade                        First Class, CGPA 3.781

- Awarded Monash Merit Scholarship and Dean's List for 3 consecutive years
- Member of Golden Key International Honor Society (by invitation only)
- Underwent Semester Exchange Program in Monash Australia, Clayton campus
- 1<sup>st</sup> Runner Up for Best Final Year Project: Simulation Based Fault Detection System

2007

### Taylor's University College

Pre-U in Sciences | Malaysia

Major                        Bio Medical Sciences  
Grade                        Tertiary Entrance Ranking Score (TER) of 97.15

- Recipient of Taylor's College Top Achievers' Scholarship