

BAY YANG JIE

Master's student in Analytics and Visualization



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PROFILE

Passionate Master's student in Analytics and Visualisation seeking a challenging role where I can leverage my analytical skills and academic background to contribute to data-driven decision-making processes.

Eager to apply theoretical knowledge gained through coursework and hands-on experience to real-world scenarios, ultimately driving innovation and efficiency within an organization.

SKILLS

LANGUAGES: SQL, Python, R

TOOLS: Tableau, Tableplus, Jupyter Notebook, Rstudio, SPSS, Spyder

EXPERIENCE

TAPEOUT ENGINEER

GLOBALFOUNDRIES

SEPT 2017 to JULY 2023

- Liaised with customer and field engineers to understand and translate customer's chip requirements into design blueprints
- Analyzed customer's chip design against design specs to ensure suitability for downstream manufacturing
- Collaborated with engineers from fab, R&D and design support teams to remedy urgent design errors
- Supported process integration teams by ensuring critical change requests are submitted to accommodate non-standard design requirements by the customers
- Handled transfer of newly developed technologies from R&D team to production level in preparation for capacity loading by customers
- Worked with R&D teams to understand critical updates to internal manufacturing data specs critical to downstream process improvements

EDUCATION

MASTER OF ANALYTICS AND VISUALISATION

Singapore University of Social Sciences (SUSS)

Expected: November 2024

Courses

- **Data Visualisation and Storytelling**

Completed a project that involved extracting a dataset from the World Development Indicators (WDI) to understand association between conflict, aid provision, disasters, and economic indicators. Employed R to clean, process the data and formulate visualizations for analysis

- **Data Wrangling**

Assembled a data flow between MySQL, Python and R for creating a reproducible workflow process. Employed Python to read in multiple datasets, then using MySQL to subset columns for creating a new table record. The new SQL table record was then read into R for regression and visualization analysis

- **Applied Statistical Methods and Causal Analysis**

Performed EDA on a dataset of supermarket stores. R was used to summarize, visualize, and explore the data to gain insights and understanding. Statistical analysis together with hypothesis testing were then employed to identify the effect of discount on sales as part of the analysis objective

- **Hyperautomation**

Constructed a workflow that utilized UiPath automation to receive an input, auto evaluate the data and provided an output to address an enterprise function problem. The use case was the creation of an after-sales survey form which could be reused multiple times.

- **Data Analytics for Decision Makers**

Learned to apply the CRISP-DM framework together with the application of data visualisation, association rule mining, clustering and predictive modelling. Appraised the suitability of analytical techniques by evaluating the performance of individual models. Acquired knowledge in using SPSS Modeler software for constructing analytical solutions.

- **Foundation to Python for AI**

Learned the essentials of Python programming in data management, data analytics, and data visualisation. Acquired knowledge on the concepts of machine learning and deep learning as well as differentiating between supervised and unsupervised learning. Learned to execute and implement AI models for solving real-life problems. Applied the use of Python toolkits to visualise and present results from machine learning.

- **Applied Forecasting**

Design forecasting models appropriate for available historical data using R and appraised the suitability of various forecasting frameworks. Learned to prepare the data for forecasting and select the most suitable forecasting model related to the business problem.

- **Data Integration for Enterprise Automation**

Constructed API-based automation and integration workflows for solving business problems. Learned how to enhance workflow by creating a scalable integration framework for digital transformation in real-life scenarios. Acquired knowledge in Workato as an integration platform tool to connect and automate workflows/data synchronization across different applications and systems using pre-built connectors.

BACHELOR OF ENGINEERING (MATERIALS ENGINEERING)

Nanyang Technological University (NTU)

2014 - 2017