

SKILLS AND EXPERTISE

Microsoft Excel (Vlookup, Conditional Formatting, Pivot table)
SQL (MySQL, SQLite)
Python (Numpy, Pandas, Matplotlib, Seaborn)
Tableau

Microsoft Power Point
Microsoft Power BI
Data cleaning and preparation
Data visualization
Data transformation

PROJECTS

E-Commerce Walmart Sales - Personal Project

November 2024

- Analyzed Walmart customer transaction data to understand purchase behavior and key demographic factors influencing sales, using Python (Pandas, Matplotlib, Seaborn).
- Conducted data cleaning and preprocessing to manage missing values and ensure consistency across user demographics, product categories, and purchase amounts.
- Explored customer demographics, such as age groups, gender, occupation, marital status, and city category, to uncover patterns in purchasing behavior.
- Developed visualizations with Matplotlib and Seaborn, including distribution plots and bar charts to display relationships between demographics, product categories, and purchase amounts.

COVID-19 Data Analysis Project - Personal Project

November 2024

- Analyzed global COVID-19 data from 2020 – 2021 to examine the global numbers of total deaths and total vaccinations, using SQL for data cleaning, processing, EDA (Exploratory Data Analysis) and Tableau for data visualization.
- Cleaned, transformed, and aggregated large datasets to produce reliable insights, calculating metrics like countries with highest infection rate, countries with highest death count and percentage of population that has received vaccinations.
- Built an interactive Tableau dashboard featuring time series graphs, maps, and bar charts to display trends in COVID-19 cases, deaths, and vaccination rates across countries.

Tech Layoffs - Personal Project

October 2024

- Analyzed tech layoffs data from 2020 – 2023 to uncover trends and insights related to workforce reductions in the tech industry using SQL for data cleaning and exploratory data analysis (EDA).
- With SQL, data cleaning tasks are performed such as handling missing values, removing duplicates, and standardizing columns for consistency.
- Exploratory data analysis (EDA) is conducted to identify key patterns, such as the impact of layoffs by company, industry, and date. Aggregated and filtered data, revealing important metrics such as the total number of layoffs, peak periods of layoffs, and industry-specific trends. This analysis provided valuable insights into the layoff state of the tech job market.

PROFESSIONAL EXPERIENCE

Infineon Technologies (M) Sdn Bhd

December 2021 - May 2024

Product Engineer (PE)

- Elevate process capability, minimize defects and enhance throughput in high-volume manufacturing through the utilization of statistical process control (SPC), Design of Experiment (DOE) techniques, data-driven decision making and systematic problem-solving expertise. Successfully achieved 0.4% higher yield in fiscal year 2022/2023.
- Collaborated with cross-functional teams to create and execute data-driven solutions for business challenges. Worked closely with Unit Process Engineers (UPE) to implement corrective actions and process improvements, ensuring compliance with quality standards while enhancing product yield and efficiency. Successfully reduced wafer break incidents from 58 cases to 21 cases between fiscal years 2021/2022 and 2022/2023.
- Compiled and analyzed process data to create reports with CEDA (Common Engineering Data Analysis) for assessing process yield performance. Developed automation reports that minimized manual tasks, leading to improved efficiency in overall data analysis.
- Optimized Statistical Bin Analysis (SBA) to prevent invalid stops. Conducted statistical data analysis and identified root causes of yield deviations, resolving any issues that may arise.
- Analyze and interpret large datasets to identify trends and insights that drive business decisions.
- Support Quality Department to ensure technology met qualification and reliability standards. Managed data governance and quality processes, ensuring the accuracy and completeness of data.

EDUCATION

Bachelor of Science (Honours) Chemistry, Universiti Tunku Abdul Rahman, Kampar, Perak

May 2018 - June 2021

- Major: Analytical Chemistry, Physical Chemistry, Computer Systems and Applications, Environmental Chemistry, Organic Chemistry, Calculus and Algebra, Ancillary Statistics