Melody Gao | Business Analyst, Data Analyst

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✓ Business Intelligence	✓ Business Requirement Document	✓ Project Management
✓ Data Analytics	✓ Process Improvement	✓ Relationship Management
✓ Data Modelling	✓ System Integration / Migration	✓ Documentation

SUMMARY OF QUALIFICATIONS

- Data-driven analyst with experience in **Consulting**, **Data Analytics**, and **Process Improvement**
- Proficient in **Python** (pandas, numpy, matplotlib, simpy, scikit-learn), **SQL Queries**, **R**, **Google Analytics**
- Excellent knowledge in **Data Warehouse**: ETL, Business Intelligence (BI): **Power BI**, **Tableau**, OLAP, OLTP
- Excellent data science knowledge: naive bayes, decision tree, logistic regression, random forest, Monte Carlo
- Strong understanding of **Project Management: SDLC**, **Agile** and Waterfall methodology, **JIRA**
- Strong communication skills to bridge IT and business lines to align project goals
- Experienced in supporting QA and UAT activities to ensure system reliability and efficiency
- Strong analytical, problem-solving and decision-making skills; self-motivated, result-oriented

WORK EXPERIENCE

Business Analyst | **UBC Centre for Operations Excellence** May 2020 – Sep 2020

- Optimized a discrete-event simulation model in a tug logistics project to improve Vancouver Harbor traffic
- Gathered business requirements and use cases to document business requirement (BRD) and process flow in Visio
- Collected and extracted data and performed data manipulation based on the Vancouver Harbor logistics data
- Transformed existed data into parameters applicable to simulation model
- Analyzed data including weather, vessel scheduling, anchorage assignment, formed regression in random numbers to reflect actual data distribution of 2019 Vancouver harbor traffic
- Developed a simulation model using Python SIMPY with 95% confidence, reflected vessel movements and delivered optimal solutions in tug arrangement, performed testing, validation and scenario analysis
- Developed production dashboards in Tableau, led weekly touchpoints with clients

Environment: Python, Tableau, SQL, Excel, Visio

Associate | **Deloitte** Oct 2018 – Aug 2019

- Developed data-driven strategies for a major mining client to improve business performance and internal control
- Analyzed marketing and sales data in Access, SQL to recommend revenue optimization strategy by $80,000 profit
- Developed Python models to detect fraud by 20% increase in accuracy, utilizing NLP in scanning contents in invoices
- Produced BI dashboards to visualize revenue, expense, and financial ratio KPIs using Power BI

Environment: Python, Power BI, Access, SQL, JIRA

EDUCATION

Master of Business Analytics (MBAN), UBC Sauder School of Business*, Vancouver, BC* Jun 2019 – Aug 2020
Master of Accountancy, University of Wisconsin, US Sep 2017 – May 2018
Bachelor of Business Administration, Major: Accounting, University of Wisconsin, US Sep 2013 – May 2017

DATA ANALYTICS PROJECT

Data Warehouse: COVID-19 Quarantine Policy Modeling

- Researched impact of COVID-19 quarantine policies in Canada. Applied Monte Carlo simulation methodology to show potential difference of death number caused by implementation of quarantine policy

Predictive Modelling: Vancouver Airport electricity usage

- Chose ARIMA model in capturing pattern of Vancouver International Airport's (YVR) electricity usage for past five years, predicted next five years in R programming and offered suggestions to lower electricity usage by 5%

Business Intelligence: Consumers centric Product Analysis

- Defined customer segmentation by R, Crosstab, factor analysis and conjoint analysis, projected survey result to population and targeted potential customer groups for mini-van company, increased advertising efficiency by 10%

Artificial Intelligence: Natural Language Processing with Social Media

- Collected Tweets from Twitter API, performing sentiment Analysis and Grammar Parsing using Text Blob, reflecting people's attitude towards Sauder Business School