Marc Cheng

438 886 8425 | marccheng@outlook.com
Mathematics Specialist | Data Scientist

SKILLS

■ **Machine Learning**
pytorch, tensorflow, keras, scikit-learn

■ **Data Science**
pandas, numpy, scipy, matplotlib, seaborn

■ **Coding / Scripting**
Python, Jupyter Notebook, R, SAS, HTML, CSS, JavaScript, Node.js, Git, Bash, PowerShell

■ **Databases**
Oracle, MySQL, IBM DB2, SSMS, MS Access

■ **SaaS / Softwares**
Amazon AWS, MS Azure, SAP Hybris, Google Colab, BigQuery, Informatica P360, Tableau, Power BI

■ **Languages**
English, French, Mandarin

■ **Interest & Hobby**
Skateboarding, Rock Climbing, Piano, Guitar, Solving 3x3 Rubik's cube under one minute

AWARDS

■ **University of Toronto**
2023, 2022, 2021 | Dean's List

■ **L'Université Laval**
Concours Opti-math
2015 | 5th place in Province
2014 | 7th place in Province

■ **University of Waterloo**
Gauss Mathematics Contests
2013 | Distinction

LINKS

chengmarc.com/main

github.com/chengmarc

linkedin.com/in/marc-cheng

PROFESSIONAL EXPERIENCE

Rexel Group | Product Data Specialist
June 2023 – Present | Mississauga, Head Office

- Successfully completed a year-long implementation project of the new PIM system, developed key functionalities in Informatica Product 360.
- Carried out the entire end-to-end (ERP - PIM - SAP) testing process in the UAT environment, in collaboration with the TIBCO BW5 team.
- Handled daily product quality maintenance of 200,000 unique SKUs, resolved JIRA tickets using Python scripts and custom SQL queries on IBM AS400.
- Enhanced product data quality across divisions by collaborating with industry-standard data sources and designing automated daily data quality rules.
- Developed dataflow control processes using AWS CLI and PowerShell scripts.
- Participated in RexelGPT, a now live LLM project during its beta testing phase.

Key Skills: PIM / MDM Software, ERP Software, SAP Hybris, AWS, Python, SQL

Deloitte Canada | Data Analyst (Co-op)
July 2021 – April 2022 | Toronto, Head Office

- Validated anti-money laundering models written in R and Python for Scotiabank.
- Completed the validation of 8 AML models using both supervised and unsupervised clustering techniques, including KNN and K-Means.
- Extracted 1,000,000 to 20,000,000 entries of transactional data from an Oracle database using SQL and verified data integrity with Jupyter Notebook.
- Validated redemption models for LoyaltyOne using SQL Server Management Studio in conjunction with SAS, providing insights into customer conversion rates for Air Miles and American Express.
- Collaborated on the valuation of 20 derivative contracts, including interest rate swaps and commodity swaps (e.g., natural gas and crude oil), using Bloomberg Terminal.

Key Skills: R, Python, SQL, SAS, Jupyter Notebook, Bloomberg Terminal

ADDITIONAL EXPERIENCE

Implementation of GPT-2 Large Language Model
- Designed the model with 768-dimensional embeddings and 12-head attention.
- Trained with 162M parameters, applied weight masking to prevent overfitting.

Key Skills: Architecture Design, Natural Language Processing

Deep Residual Networks for CIFAR-10 and CIFAR-100 Dataset
- Implemented 34-layer and 101-layer residual networks for CIFAR-10 and CIFAR-100.
- Accelerated the training process by enabling CUDA on an RTX 3060 (12GB).

Key Skills: Deep Learning, Computer Vision

Quantitative Analysis in Cryptocurrency Trading
- Applied unsupervised clustering technique (DBSCAN) to identify outliers.
- Used RNN and LSTM in conjunction with fitting techniques to predict future prices.

Key Skills: Clustering, Time Series Analysis, Regression

EDUCATION

University of Toronto | Honours Bachelor of Science
September 2019 – April 2023 | Toronto, St. Geroge Campus

- Mathematics Specialist (Focus in Probability/Statistics) | GPA 3.6/4.0