Marc Cheng

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Mathematics Specialist | Data Analyst | Data Specialist

SKILLS

■ Programming
Python, Jupyter Notebook, R, JavaScript, Node.js

■ Machine Learning
pytorch, keras, sklearn

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

■ Cloud Service
Amazon AWS, Google Colab, Google BigQuery

■ Database
SQL, SSMS, Oracle, IBM DB2

■ Shell Scripting
Bash, CMD, PowerShell

■ Languages
English, French, Mandarin

■ Interest & Hobby
Skateboarding, Rock Climbing, Ukelele, 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 Quebec
2014 | 7th place in Quebec

■ University of Waterloo
Gauss Mathematics Contests
2013 | Distinction

ACTIVITIES

University of Toronto Anime Comic and Game

October 2021 – January 2023
President | Toronto, ON

Presented a Lunar New Year Gala with hundreds of spectators. Generated revenue of $33000 and achieved a net profit of $2200 through the coordination and execution of 12 events.

EDUCATION

UNIVERSITY OF TORONTO | September 2019 – April 2023

H.B.Sc. Honours Bachelor of Science | Toronto, ON
- Mathematics Specialist (Focus in Probability/Statistics) | GPA 3.6/4.0
- Mathematics Major • Statistics Major

PROFESSIONAL EXPERIENCE

REXEL CANADA | June 2023 – Present

Product Data Specialist | Mississauga, ON
- Developed dataflow control process using AWS CLI.
- Developed key functionalities for import and export operations in Informatica Product 360.
- Oversaw the entire end-to-end (ERP - TIBCO - PIM - TIBCO - Hybris) testing process in the UAT environment.
- Developed a Python application to update product keywords.
- Utilized custom SQL queries in conjunction with IBM AS400 to maintain product information stored in IBM DB2.
- Participated in RexelGPT large language model project during beta testing phase.

Key Skills: AWS CLI, ERP Software, PIM Software (AS400, P360), SQL

DELOITTE CANADA | July 2021 – April 2022

Data Analyst Intern (Co-op) | Toronto, ON
- Validated anti-money laundering models for Scotiabank.
- Independently completed the validation of 8 AML models written in R and Python.
- Extracted 1,000,000 to 20,000,000 entries of transactional data from an Oracle database using SQL and checked the integrity of the data using Jupyter Notebook.
- Validated redemption models for LoyaltyOne using SQL Server Management Studio and provided insights based on the conversion rate of several partners, including Air Miles and American Express.
- Valuated interest rate swaps and commodity swaps, such as natural gas, crude oil, and electricity, using the Bloomberg Terminal; collaborated with a group of seven to complete the valuation of 20 derivative contracts.

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

PROJECTS

Residual Network on CIFAR-10 and CIFAR-100 Dataset
- 21M parameters for ResNet34; 44M parameters for ResNet101.
- Achieved 95.40% accuracy on CIFAR-10 test dataset.

Key Skills: pytorch, ResNet, Image Labelling, Deep Learning

Convolutional Neural Network for MNIST Dataset
- Accelerated the training process by enabling CUDA on RTX-3060 (12GB).
- Achieved 98.32% accuracy on the test dataset.

Key Skills: pytorch, ConvNet, Machine Learning

Quantitative Analysis on Cryptocurrency Market
- Use unsupervised machine learning techniques to identify outliers.
- Quantified the relationship between trading volume and market capitalization by fitting a logarithmic model.

Key Skills: R, Regression, Clustering, DBSCAN