# JEFFREY CHAK-HIM CHAN

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### PROFESSIONAL EXPERIENCE

# **Data Engineering Intern**

May 2021 - August 2021

Intact Financial Corporation. Montreal, QC - Canada

In this role I translated the business demands to the technical requirements for the new Snowflake database systems. Ensuring that the quality of transformed data after mapping remained consistent and accurate using Erwin Data Catalog reducing the risk of costly corrections to their newly constructed databases. I worked with Data Engineers to manipulate existing data structures and file formats to conform towards allowed Snowflake data type.

#### DATA SYSTEM DESIGN

 Analyzed existing data system capabilities, investigated prospective systems given new system requirements, and proposed possible solutions

#### **DATABASE MIGRATION**

- Documented and solved conflicts within databases using data validation within data cataloguing software
- Engineered and modified data structures withing the legacy database to conform to data input requirements of the insurance pricing engine
- Optimized data storage alongside Data Engineers in developing a proof of concept after completion of the analysis Relevant Skills: Python, SQL Server databases. Data Analysis, Erwin Data Catalogue, Snowflake

### **Business Intelligence Developer**

January 2021 - April 2021

McGill University. Montreal, QC - Canada

As a developer I Identified the requirements and developed SQL scripts to maintain the existing Oracle database servers from costly and repetitive time-consuming manual intervention on large databases. Collaborated with technical teams to identify usage of data followed by assessing the impact of misuse and security risks and developed plans to correct database to application issues.

### DATA EXTRACTION AND ANALYTICS

- Extracted requirements, coded, and tested new software, perform maintenance and enhancements to software
- Generated business and database health reports using PowerBI and SSRS

Relevant Skills: SQL Server databases. Software Development and Analysis

#### **Lead Student Researcher and Programmer**

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June 2019 - February 2020

John Abbott College, Montreal, QC - Canada

As the lead student programmer, I developed workflows and programs to ingest, process and visualize gyroscopic accelerometer device data and supervised the on-boarding of new student researchers.

### DATA EXTRACTION, PIPELINES AND MACHINE LEARNING

- Performed extraction, preprocessing, visualization, and analysis of data from sensors using Python
- Documented development risk, including hardware incompatibilities, and toolset limitations

Relevant Skills: Python, Analysis, Problem-Solving, Teamwork, Collaboration, and Project Management

# **EDUCATION**

# Bachelor of Engineering - Software Engineering C-Edge

January 2020 - April 2023

Concordia University - Gina Cody School of Engineering, Montreal, QC - Canada

- GPA: 3.6/4.3
- Member of the Institute for Co-Operative Education
- Student Leadership: Executive Vice-President, Engineering and Commerce Case Competition
- Relevant Courses: Machine Learning, Big Data Analytics, Artificial Intelligence, Data Structures and Algorithms

# **CERTIFICATIONS, DESIGNATIONS & CLEARANCES**

**AWS Certified Cloud Practitioner** 

November 2022

**Amazon Web Services** 

Python

Testdome

August 2019

### PLATFORMS & PROGRAMMING LANGUAGES

Languages: Python (Intermediate), Java, SQL, MongoDB, JavaScript, HTML, CSS, Git

Cloud: AWS

Data Visualization: matplotlib, Power BI

Packages (Selected): sklearn, numpy, pandas, nltk, TensorFlow 2.0, keras, PySpark

# **COMMUNITY/PROFESSIONAL ACTIVITIES**

### **Case Competition Judge**

September 2022 - Present

Engineering and Commerce Case Competition, Montreal, QC - Canada

- Provide feedback to students on innovative engineering and business solutions to industry challenges
- Review and critique student solutions leveraging expertise in engineering and design

### **Executive Vice-President**

April 2021 - May 2022

Engineering and Commerce Case Competition, Montreal, QC - Canada

- Led a team of Vice-Presidents to accomplish their departmental goals
- Executed administrative tasks to support to the President with their mandate and tasks
- Handled operational tasks such as setting deadlines, overseeing department progress, and organizing meetings
- Oversaw a weeklong international engineering and business case competition

### Vice-President, Technology

July 2020 - April 2021

Engineering and Commerce Case Competition, Montreal, QC - Canada

- Led the transition to an online case competition platform during the COVID-19 pandemic
- Administered technical support in a timely manner during online case competition
- · Supervised and organized communication systems on platforms
- Trained team members through creating written instructions and media

### ADDITIONAL INFORMATION

• English, French (Spoken, Written) | Cantonese (Spoken)