Carl Yiqing Chen

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SUMMARY OF QUALIFICATIONS

- 2+ years of hands-on experience in business intelligence, data management, and machine learning tools
- Outstanding analytical skills in data warehousing to collect, organize, visualize, and assimilate data
- Proficiency with ETL & statistical tools SQL, Python, Matlab, SAS and R
- A motivated Master graduate (9.6/10.0) in Machine Learning who is passionate for data science

TECHNICAL SKILLS

- Libraries: SciPy, Pandas, Pytorch, Keras, TensorFlow, OpenCV, and Scikit-learn
- Database Servers: PostgreSQL, MySQL, Oracle Database, and AWS Redshift
- Toolset: Version Control Git, Docker, Excel VBA, Microsoft Power BI and Tableau

EMPLOYMENT EXPERIENCE

Business Analyst (Part-time) Apr. 2020 – Feb. 2021
China Telecom Americas Corporation (Canada) Toronto, Ontario

- Collected the retail sale data from **AWS Redshift** warehouse using **SQL** for phone-plan price prediction report
- Segmented 300,000+ GTA customers based on their utility usage patterns using **Python Pandas**, with better-informed and fair pricing policy decisions, saving ~10-hour labor per month
- Improved original clustering by incorporating additional features (e.g. customer utility usage, etc.) and optimized 1000,000+ clients' records for training using **Python Scikit-learn**
- Collaborated with product managers to perform cohort analysis that identified an opportunity to reduce pricing by ~5% in 2020 to boost monthly revenue and presented findings to stakeholders via **Tableau** for business KPI

Teaching Assistant (Contract) Jan. 2020 – Dec. 2020
University of Ottawa Ottawa, Ontario

- Delivered tutorial courses of System Modeling and graded assignments and exams for ~300 undergraduates
- Assisted undergraduates in debugging codes, with ~60% of 300 students satisfying with my work
- Supervised undergraduates in accomplishing **Matlab** projects and evaluated their project report

PROJECT EXPERIENCE

Credit Risk Analysis Based on Database from Financial Institutions Using SAS Jan. 2020 – May. 2020
- Utilized **SAS** to analyze complete loan datasets with 20,000+ records, provided by Lending Club
- Developed probability of default model to forecast whether a debtor is meets his/her loan obligations
- Evaluated the credit risk accompanying a loan portfolio with ~ 67.3 % prediction accuracy

Logistic Regression Model Based on Bank Database for Binary Classification Sep. 2019 – Dec. 2019
- Queried the data from Bank of China and cleaned with **SQL** as a part of ETL process
- Implemented quantitative analysis and data mining (e.g. Logistic Regression) to analyze customer characteristics
- Designed machine learning dashboards to classify customers using **Python Scikit-learn**, with 1/4 model size, 1/2 training time, 1/5 inference time, and 2 × faster convergence compared with conventional regressions
- Tested and compared the performance on test dataset with ~ 89.1 % prediction accuracy

EDUCATION BACKGROUND

University of Ottawa Sep. 2019 – Sep. 2021
Master of Applied Science (Thesis-based, AI & Robotics) Ottawa, Ontario

- Master Student Scholarship: $1,000 per term; GPA: 9.6/10.0
- Related course: GNG 5125 Data Science Applications, ELG 5255 Applied Machine Learning, etc.

Southwest University Sep. 2015 – Jun. 2019
Bachelor of Science (Honors, Computer Science) Chongqing, China

- Undergraduate Student Scholarship: ~$1, 000 per year; GPA: 9.2/10.0
- Related course: CITS 2200 Data Structures and Algorithms, STAT 3064 Statistical Learning, etc.