Benjamin Chan

25 Cole St, Toronto, ON, M5A 4M7

📱 289-968-8826 | ✉ benchanczh@gmail.com | 🏠 benchanczh.github.io | benchanczh

Skills

- **Languages:** Python(Pandas, Numpy, Matplotlib), R(Tidyverse, ggplot2, Shiny, Leaflet, pool), SQL
- **Databases:** MS SQL Sever, MySQL, Hive
- **Tools:** Jupyter Notebook, Tableau, Git

Work Experience

Scotiabank   *Toronto, ON*
Senior Data Analyst   *June 2017 - Present*

- Built data pipelines that extract structured data from multiple sources, such as Hive and MS SQL Sever, and transform data into desired format to streamline Tableau dashboard development using SQLAlchemy, pyodbc and Pandas libraries
- Developed a web dashboard to visualize spatial data of Unusual Transaction Reports(UTR) at branch level, which reveals unusual/suspicious activity patterns of UTR conductors and reduces a significant amount of time for UTR investigation using R Shiny framework and Leaflet package.
- Created a web application for a network analysis of SWIFT wire message data that improved AML management team's understanding of the Recency, Frequency and Monetary Value of Scotiabank's customer wire activities using R Shiny, visNetwork packages and SQL.
- Built a XML parser to extract data from Financial Crime Risk Management application and developed a data set to empower AML Policy and Reporting team to conduct inadequate field analysis and enhance FINTRAC report quality using Pandas, xmltodict and Click libraries.

MUFG Fund Services   *Waterloo, ON*
Senior Fund Accountant   *January 2015 - May 2017*

- Played an instrumental role in conducting portfolio sector exposure reporting, analyzing Profit and Loss for all asset type, calculating available free cash and compiling weekly and monthly performance reports for Family Office and Hedge Fund Managers with great accuracy and attentions to details
- Assisted to verify OTC pricing by validating Excel-based financial models and confirmed listed positions'(common stocks/fixed asset/warrants/options/etc.) price and corporate actions using Bloomberg Terminal

Meridian Credit Union   *St. Catharines, ON*
Performance Measurement Co-op   *January 2014 - December 2014*

- Produced high-level analytical reports for the executive team with the objective of assisting them to make proactive decision using advanced Excel and SQL skills
- Streamlined Meridian Credit Union's Profitability Initiatives Project with VBA in Excel

Projects

Hive editor in R Shiny application   *May 2018 - June 2018*

- Designed and developed a R package which includes a customized web-based editor for my team to execute Hive queries using R Shiny and shinyAce packages
- The editor provides syntax highlight, auto complete functions and presents query results in interactive HTML table powered by DataTables JS library
- Implemented a recent queries table in reverse chronological order for users to access to historical queries

STR Conversion Prediction with Natural Language Processing   *April 2018 - May 2018*

- Performed tokenization and TF-IDF to covert 11,000 Unusual Transaction Report(UTR) activity description data to vector space for NLP study using Python NLTK library
- Partnered with data scientists to build an Naive Bayes Classifier to predict UTR to STR conversion and achieved 31% increase in conversion rate

Interative R tidyverse tutorial   *August 2017 - September 2017*

- Designed and developed a web-base interactive tutorial for users to learn R tidyverse package
- The tutorial includes exercise sections to allow users to directly execute R code and see it's results, and quiz sections to help verify that users understand the concepts presented

Education

Goodman School of Business, Brock University   *St. Catharines, ON*
Master of Business Administration, Finance, Co-op Option   *September 2012 - October 2014*

Guangdong University of Technology   *Guangzhou, Guangdong, China*
Bachelor of Economics   *September 2008 - June 2012*