Zimeng Ming

Research Technician (Data Specialist)

Address: 313-5687 Gray Ave, Vancouver, BC, V6S 0K7

Phone: 780-952-2116

E-mail: Brandonming0916@gmail.com

LinkedIn: https://www.linkedin.com/in/zimeng-brandon-ming-588559121/

GitHub: https://github.com/Brandon0916/ResumeFolder

- 2-year experience with the role in Data Analysis and 4 co-op terms experience as data analysis.
- Excellent knowledge about Computer Science Language and Statistic analytical methods who receive A- in most core courses related to data science in most recent term.
- Familiar with various programming language such as Python, Java, and JavaScripts.
- Familiar with the majority tools as a Data Analysis such as Tableau, Power BI, SQL and python packages.
- Familiar with JSON, Spark, Hadoop, Pandas, Numpy, Matplotlib, Re, NTLK, Wordcloud and Beautifulsoup.
- Familiar with most algorithm such as SVM, Cluster, Naive Bayes, etc.
- Also has some experience on software design and testing. Familiar with Xcode, Android studio and Flutter.
- Excellent communication skills including fluency in English and Mandarin.
- Deep understanding and extensive experiences of Leaderships and cooperation with other teammates. 2-year experience for serving for Chinese Student Association as an exclusive director.

Education

2016-01 - Current

Bachelor of Science: Combined Major in Computer Science and Statistic

University Of Victoria - Victoria, BC

Skills

- Python
- Java
- R
- SQL
- JavaScript/Node.js
- JSON
- Python Data Analysis Tools (Pandas, Nltk, numpy, scikit-learn,etc.)
- Python Data Visualization tools (matplotlib, Dash,etc.)
- Data Analysis Software(Python Notebook, RStudio, Tableau, Power BI)
- Database(MonogoDB, DBeaver, MS Access)
- Statistic Method, Data Mining and Machine Learning

Work History

Research Technician (Data Specialist)

BC Ministry of Forest, Nelson, BC

- As a data science student in the team of Research Section in Resource Management Kootenay Boundary Region.
- Take in charge of collecting, arranging and analysis the data from the West Arm Demonstration Forest(WADF) research project stations.
- Clean the unreliable data and filling the gap using machine learning and statistic strategies though Python and R.
- Quality assurance(QA) and quality control(QC) the datasets and documentation the QA/QC procedures.
- Using R to analysis the climate dataset, create the R Script and comments in order for the future research use.
- Write the report about summarizing the QA/QC methods and results.
- Projects Complete:
  a) WADF Climate Dataset Quality Assurance and Quality Control Process, with Natasha Neumann.
  b) The User Manual for the QA/QC system.
  c) Link: https://github.com/Brandon0916/ResumeFolder/tree/main/DataScience/2020_WADF_Climate_Data_Process
  d) Kootenay Boundary Region Tree Cankers Dataset Analyst, with Michael Murray.
  e) Entomologist IBD Cost Benefit Analysis 2020 with Marnie Duthie-Holt.
  f) First two the project is using R language and also have the user manual for each system. The two system are able to use in different dataset in order for the future research. The last project with Marine are using the MS Access Database tools and the analysis are based on SQL。

2019-06 - 2019-08

Data Science Research Intern

China Construction Bank Fintech Ltd, Wuhan, Hubei, China

- As a data science student in the team of anti-telecommunications fraud in the department of software development.
- Take in charge of collecting fraud cases data from the daily banking transactions and select the useful data in order to analysis.
- Build model to determine the relationship between the fraud transaction attributes and find the most common attributes that a suspect fraud transaction may have.
- Test the new functions of the software and assist the senior engineer to solve the problem.
- Translate the documentations and research papers between English and Chinese.
- Learning and using the JSON, Node.js, React, Neo4j and Ant Design for create project of the Knowledge Graph for the fraud data.
- Using Weka, R to analysis the fraud data.

Certifications

Certification of internship in China Construction Bank

IBM Data Science (Coursera) – In progress

Projects

1. Predict Unemployment Rate of Canada

a) Language using: Python.

b) Method Used: Pearson Correlation, K-mean Cluster, Polynomial Regression, Ridge Regression,

b) Using the data from Statistic Canada about Unemployment data from Jan 2010 to Jan 2019, try to build the model for the unemployment rate of Canada.

c) Cooperated with Ronald Liu.

d)Link: https://github.com/Brandon0916/ResumeFolder/blob/main/DataScience/SENG_474_Data_Mining/Predict_Unemployment_rate_of_Canada/474Final_Report.pdf

2. Track COVID-19 Data

a) Language: Python

b) Additional Software: Tableau

c) Tracking the case updated by the CDC of the British Columbia and showing on the map

d) The data are download using a spider tool and load into tableau.

e) Using Tableau to form a visualization geography data graph.

f) link: https://github.com/Brandon0916/ResumeFolder/tree/main/DataScience/Covid

3. Analysis the elections by using Tweeter

a) Language: Python

b) Additional Software: Tableau

c) Modules are used: Pandas, Tweedy, re, numpy, matplotlib

d) Aiming two elections: BC Election 2020, US president election 2020

e) Using Tweepy module to get the data for the tweeters under the certain topics that related to the elections. Using the tools to clean the data.

f) Analysis the data from 4 directions: The location of the tweeter, the text of the tweeter, the most interaction topics that the candidates provide for this election and the potential coefficients.

g) Outcomes: Plots for analysis, Maps of the supports, Word-Cloud for the tweeters.

h) Try to using the method of defined the positive words and negative words and apply to machine learning algorithm to automatically defined the user are support to the candidates or not.

i) Link: https://github.com/Brandon0916/ResumeFolder/tree/main/DataScience/2020_Election_Data

4. SQL Practice

a) Language using: SQL.

b) The assignment of course about database system(CSC 370).

c) Cooperated with Yunkun Li.

d) Link: https://github.com/Brandon0916/ResumeFolder/tree/main/DataScience/CSC_370_SQL_courses

5. Data Learning

a) Language using: python
b) The assignment of course about Data Mining (SENG 474).
c) Have training data set and test data set, using training data to teach the program know how to judge the test data, and provide the result for it.
d) Cooperated with Ronald Liu.
e) Link:https://github.com/Brandon0916/ResumeFolder/tree/main/DataScience/SENG_474_Data_Mining

6. Using Search Algorithm to solve the real questions.
a) Language using: Java
b) The assignment of course about Artificial Intelligence (CSC 421).
c) Using the AI search algorithm to solve the different types of real problems.
d) The problems are related to Cross-river problems, Pancake Sorting problems and other problem related to AI topics.
f) Cooperated with Ronald Liu.
g)Link:https://github.com/Brandon0916/ResumeFolder/tree/main/DataScience/CSC_421_Aritificial_Intelligence

7. Other R Script Project
a) Using R to solve the real statistic questions
b) link: https://github.com/Brandon0916/ResumeFolder/tree/main/DataScience/Statistic_Courses

Reference

1. **Natasha Neumann, PhD PAg, Research Hydrologist, Kootenay Boundary Region for BC Ministry of Forests, Lands, Natural Resource Operations and Rural Development.**

   Email: Natasha.Neumann@gov.bc.ca

   Natasha is my supervisor for my Co-op term in BC Ministry of Forest, Lands, Natural Resource Operation and Rural Development, she is hydrologist in Kootenary Boundary Region in British Columbia. Natasha is specialist on climate and hydrology area, she leads the team about climate data analysis and take in charge of "The West Arm Demonstration Forest" climate stations.

2. **Yongbo Liu, MSc, Manager of the team of Anti-telecommunications fraud team in China Construction Bank Fintech Ltd.**

   Email: liuyongbo.wh@ccbft.com

   Yongbo takes in charge of the team that develops the anti-fraud application for China Construction Bank which is one of the largest bank in the world. Yongbo has been spent 3 months with me and direct supervise me for the coop study. Yongbo is a specialist on Software engineering, Data Visualization and anti-fraud transaction area.