Titus Liu

**EDUCATION** 

Simon Fraser University

Bachelor of Science in Data Science

Burnaby, Canada Sep. 2017 - Jun. 2021

Email: contact@titusl.com

EXPERIENCE

Lighter Foodprint

Vancouver BC, Canada

Data Analyst Jan 2022 - present

**Tableau**: Created client relation management reports using Tableau Dashboards to help inform the customer growth team on partnership expansion.

**API Access**: Implemented a social media digital impact tracker using ChartJS and API calls from Facebook, LinkedIn, and Instagram.

Reddit Karma Point Tracker

Web Application

Jun 2021 - Sep 2021

Flask: Used Flask from Python to do an initial test built of the backend API.

**AWS**: Deployed the tested Python script on AWS Lambda and connect it to the frontend JavaScript using AWS API Gateway. Stored the crawled data into AWS Aurora serverless database.

ChartJS: Processed and delivered the data using ChartJS and vanilla JavaScript hosted on GitHub Pages.

Drug Shortage Report for Health Canada

Data Science Jan 2021 - Apr 2021

**Data Warehousing**: Load and join the dataset from Drug Shortage Canada and Drug Product Database into RStudio.

**Data Visualization**: Used libraries like GGPlot and Dplyr in R to generate multiple visualizations from transformed data.

**Analytic Report**: Produce a two-page written report on various findings regards to the cause of drug shortages in Canada using generated visualization in a two-column layout.

Dashboard on Topic modeling for EA

Data Analytic

Jan 2021 - Apr 2021

**Communication**: Independently develop a proof-of-concept to demonstrate to teammates and EA stakeholders potential solutions to word processing challenges.

**Data Wrangling**: Preprocess the raw text data using R and transform them into text corpus and a document feature matrix later used for modeling.

Natural Language Processing: Used natural language processing models, such as Latent Dirichlet Allocation and Structural Topic Modeling, to discover hidden trends among player feedback.

**RShiny Dashboard**: Develop and deploy a front-end user interface using Shiny from Rstudio to allow users to extract insight from any text dataset using natural language processing models.

Projects

Ace It - DubHacks 2019: A PDF scanner that takes questions and solution set then output them into a new PDF which randomizes the questions provided to help generate a realistic practice set.

CANSSI NCSC Ferry Delay Kaggle competition: supervised machine learning models using logistic regression, GBM, principal component regression, supported vector machine, gradient boosting, and random forest classifier to increase prediction accuracy for BC Ferry delays

**Green Food Challenge**: An Android Application consist of Carbon Calculator, Community Pledge, and Restaurant Guide to help people collectively reduce greenhouse gas emissions in Metro Vancouver.

PROGRAMMING SKILLS

• Languages: Python, Javascript, R, SQL, Java Technologies: AWS, Google Cloud, Tableau, Web Hosting