Joe Bui

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Education

Master's in Data Science | Eastern University | GPA: 4.0 — *Jan. 2021 – Nov. 2021*

Bachelor's in Biochemistry | University of Waterloo | GPA last two years: 3.7 — *Sep. 2016 – Apr. 2020*

Projects

Tasty.co Recipe Insights | GitHub — *Dec. 2021*

o Created a Tableau Dashboard providing insights on different cuisines and recipes from Tasty.co involving the most common ingredients used, nutritional values, and popularity

o Cleaned and performed EDA using SQL (PostgreSQL) on recipes and cuisine data web scraped from Tasty.co

Graphical Search Method | GitHub — *Nov. 2021*

o Deployed a Plotly Dash Application on the Google Cloud Platform, where users may graphically search for scientific journal articles on a plot that is filtered by similarity search, date, publication type, etc., and can be selected and saved into a csv file

o Web scraped 200k+ journal articles from PubMed using the Python library, BeautifulSoup4, and performed data cleaning/wrangling using Jupyter Notebooks (Pandas, NumPy)

Predicting Appliance Energy Usage in a Low Energy Building | GitHub — *Jul. 2021*

o Applied time-series regression models to predict future appliance energy usage within a low energy building

o Performed time-series data cleaning, exploratory data analyses and feature engineering (time periods, mean encoding and lags) using Python (Plotly, Pandas, NumPy)

Professional Development and Academic Services

Graduate Assistant | Eastern University | Department of Mathematical Sciences — *Mar. 2022 – Present*

o Assessed student's data science capstone projects and proposals in the breadth and quality of work done

o Established a mentor relationship with students, providing guidance on machine learning projects involving EDA, ML, and UI implementation

Co-Founder | Cultured (Start-up) | University of Waterloo, Velocity — *Jan. 2017 – Mar. 2018*

o Interviewed professors and graduate students on the workflow of research, the publishing and funding system, and the tools and skills required for replicability to investigate the problem of irreproducibility in academic research

o Designed an electronic lab notebook to improve organization and workflow efficiency of experimental procedures while preventing biases and poor habits in recording data

o *2nd Place Winner for Velocity Problem Pitch Competition W18:* Awarded $2500 to R&D by pitching the problem of irreproducibility in academic research, revolving the history, scope, and impact at an industrial level

o *1st Place Winner for St. Paul's Big Ideas Challenge S17:* Awarded $3000 and invited to the social entrepreneurship incubator, St. Paul's Greenhouse Fellows, by presenting the idea of sustainably synthesizing lab grown meat to replace the expensive costs of raising livestock for the contribution towards the sustainable UN world goal of Life on Land

Languages and Aptitudes

Python
Pandas, NumPy, Scikit-learn, Selenium, BeautifulSoup4

R
Tidyverse, Statistical Analysis, Visualization, Modeling

Excel
Vlookup, Pivot Table, Charts, Conditional formatting

SQL
PostgreSQL, Queries, Nested Subqueries, Joins, Procedures, Triggers

Data Visualization
Tableau, Qlik, Seaborn, Plotly, Matplotlib, ggplot

Machine Learning
Regression, Classification, Clustering, Time Series, NLP, TensorFlow

Deployment/Pipeline
Git, Github, Heroku, AWS, Google Cloud Platform

Volunteer Work

UWaterloo Biochem Executive
GRSM Physiotherapy Assistant
A&K Pharmacy Assistant
Epilepsy Fundraiser Manager (Epilepsy SCO)

Hobbies and Interests

Volleyball
Reading
Cooking
5am club