jacobdichter@gmail.com
(860) 484-9225
Litchfield, CT

Jacob C. Dichter

SKILLS

Languages

Python | pandas, numpy, matplotlib, sci-kit learn

SQL | aggregation, joins

Leadership

Intern management | Public speaking | Data communication

Certifications

AZ-104 Azure Fundamentals

Techniques

Data Science | linear regression, descriptive statistics, dimensionality reduction, naïve Bayes, deep neural networks, decision trees, random forest

Software | basic design patterns, object-oriented programming

Tools

Data Visualization | streamlit, Power BI, d3.js

Database | SQL Server, MySQL

IDE | VSCode, PyCharm

Cloud | MS Azure

Leisure

Ping Pong | Piano | Movies | Running

EDUCATION

University of Bridgeport — September 2024
M.S. Computer Science **|** Concentration in *Data Science* — Bridgeport, CT

GPA: 4.0, Academic Achievement Award, Upsilon Pi Epsilon (ΥΠΕ) inductee |
Coursework: Python for Data Science, Deep Learning, Cloud Computing, Data Mining, Database Design, Analysis of Algorithms

George Washington University — May 2019
B.S. Political Science **|** Minor in *Statistics* — Washington, D.C.

GPA: 3.9, *summa cum laude*, Pi Sigma Alpha (ΠΣΑ) inductee |
Coursework: Regression Analysis, Econometrics, Time Series Analysis

EXPERIENCE

University of Bridgeport — January 2023 – December 2023
Graduate Teaching Assistant — Bridgeport, CT

Evaluated Python programming assignments for Python for Data Science (CPSC 442) under Professor Sarosh Patel covering datatypes, operators, functions, loops, doc-tests, lambda functions, file processing, and other Python tasks.

U.S.-Saudi Business Council — June 2019 – December 2022
Research Analyst — Washington, D.C.

Analyzed data from government and commercial sources for economic reports and member requests. Used MS Excel and PowerQuery for data cleaning, transformation, and visualization for sector reports on finance, defense, and trade.

Wrote and researched monthly economic research reports on major macroeconomic, regulatory, and business developments for member audience.

PROJECTS

Personalized Locality Recommendation Using Cosine Similarity

Developed a geospatial locality recommendation system utilizing cosine similarity and k-means clustering in Python. Designed algorithm to analyze spatial data and user preferences, enhancing Connecticut town recommendations based on feature similarity.

Interactive Global Trade Insights Dashboard in Power BI

Built a dynamic global trade dashboard in Power BI using DAX expressions and Power Query for advanced data modeling and visualization. Integrated multiple data sources to create interactive reports highlighting trade patterns and key metrics across regions.

Forecasting for the Litchfield Road Race Using Predictive Modeling

Implemented an XGBoost predictive model in Python to forecast race outcomes and understand weather impact for the Litchfield Road Race. Utilized data preprocessing and feature engineering, including selection and scaling, to improve model performance and accuracy with historical race data.