# **Hriday Baghar**

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### Education

**University of Washington** Master of Science: Data Science Seattle, WA

Mar 2023 (Expected)

GPA: 4.0/4.0

Relevant coursework: Probability and Statistics, Data Visualization, Applied Statistics and Experimental Design, Software Design for Data Scientists, Natural Language Processing, Machine Learning, Time Series Analysis

**Vellore Institute of Technology** Bachelor of Technology: Electronics and Communication Engineering Vellore, India May 2019

CGPA: 8.73/10

### Experience

### Health Care Service Corporation (Blue Cross and Blue Shield of Illinois) Data Science Intern

Chicago, IL

Jun 2022 - Aug 2022

- Contributed to data pipeline development in SQL to leverage various in-house data sources to build datasets to be used for prediction problems in healthcare
- Improved model performance by 15% by developing new features and reducing dimensionality of claims data for a model predicting high-risk diabetic patients using feature engineering techniques
- Developed modular and re-usable Python code to evaluate and compare machine learning models through various performance metrics, confidence intervals and SHAP values that was adopted across the organization

### Mu Sigma Business Solutions Pvt. Ltd.

Bengaluru, India

Jun 2019 - Dec 2020

## **Data Analyst**

- Consulted for the Data Science and Analytics division of a Fortune 500 US Pharmaceutical company on multiple projects for their health economics and clinical trials teams
- Analyzed and visualized electronic health record (EHR) data to understand treatment patterns of cancer patients in the real world in R to identify opportunities to expand drug market share
- Built statistical models like logistic regression and Cox proportional hazards in SAS to identify factors affecting racial and other disparities in treatment access and survival for cancer patients
- Leveraged EHR data to improve clinical trial recruitment for cancer patients by 20%. Performed data manipulation, feature engineering, and patient survival analysis using the Kaplan-Meier method

#### Skills

- Programming Languages: SQL (Postgres, SQLite, Teradata, Redshift), Python (numpy, pandas, seaborn, sklearn, bs4, pytorch), R (dplyr, ggplot2, fable), SAS
- Statistics and Machine Learning: Hypothesis testing (A/B testing, robust statistics, ANOVA), Experiment Design, Survival Analysis, KNN, Decision Trees, Random Forest, K-Means Clustering, Neural Networks (CNN, RNN, LSTM), Regression (linear, logistic, splines, ridge, lasso), Seasonal ARIMA forecasting, SHAP

### **Projects**

Movie Review Classification [link]: Used Python to create a text parsing utility to clean movie reviews and prepare a bag-ofwords representation and built a logistic regression classifier from scratch to perform sentiment analysis

Analysis of News Article Popularity [link]: Performed EDA, hypothesis tests, and linear regression as an inferential tool to understand drivers of article popularity

Forecasting of Air Quality Index Time Series [link]: Seasonal ARIMA forecasting models to predict monthly air quality index for 5 different cities using tidyverse tools in R

Statistics for Dummies [link]: UI-based EDA and hypothesis testing tool using Python and Streamlit in collaboration with 3 other developers. Applied various software design concepts such as abstraction, inheritance, unit testing and CI Visualization of NBA Player Data [link]: Tableau dashboard to analyze and explore NBA player statistics, shooting accuracy and shot distribution over 20 seasons