Shikhar Bharat Shah

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EDUCATION

University of Washington

Seattle. WA

Master of Science in Information Management (Data Science specialization) | CGPA: 3.86/4

Expected: June 2021

<u>Coursework</u>: Data Science - Theoretical Foundations, Machine Learning & Econometrics, Data Science - Scaling, Applications, and Ethics, Business Intelligence Systems, Relational Database Management Systems, Basic Educational Statistics.

Teaching Assistant: Data Visualization for Data Scientists.

University of Mumbai

Mumbai, India

Bachelor of Engineering in Computer Engineering | CGPA: 8.86/10

June 2019

<u>Coursework</u>: Analysis of Algorithms, Applied Mathematics, Artificial Intelligence, Data Structures, Database Management Systems, Data Warehouse & Mining, Distributed Databases, Machine Learning, Soft Computing, Software Engineering.

TECHNICAL SKILLS

Programming languages: Python, C, C++, Java, SQL, HTML, CSS, JavaScript, and PHP.

Tools and services: R, SAS, SSIS, SQL Server, Tableau, Power BI, AWS Lambda, AWS S3, AWS API Gateway, AWS SageMaker, MATLAB, WEKA, and Excel.

Libraries: Beautiful Soup, Caret, Dplyr, Ggplot2, Matplotlib, NLTK, Numpy, Pandas, PyTorch, Scikit-learn, Scipy, Seaborn, StatsModels, TensorFlow, and Tidyverse.

WORK EXPERIENCE

PATH, Seattle WA – Data Science Intern

Sept 2020 – Present

- Using web scraping to extract text data from news websites about a malaria vaccine in three African countries.
- Applying NLP techniques to analyze data, perform sentiment analysis, and understand the vaccine acceptance.

Amazon Web Services, Seattle WA - Business Analyst Intern

June 2020 - Sept 2020

- Developed centralized reporting solutions for internal AWS Worldwide Public Sector teams using Tableau dashboards.
- Gathered data from various stakeholders using SQL Server and built dashboards satisfying customer requirements.
- Analyzed business processes, documented pain points, and suggested areas of improvement.

Central Drug Research Institute, India - Data Analyst Intern

Sept 2017 - Feb 2018

- Collected epidemiological data about Parkinson's disease in Africa through a literature review.
- Analyzed disease prevalence and incidence rates and studied disease spread with factors like age, gender, and race.
- Scraped news websites using Python to extract articles about AIDS in India to analyze public sentiment.

RESEARCH

UW HCDE Directed Research Group – Analysis Team Lead

Sept 2020 - Present

- Analyzing social media data using PostgreSQL, Python, and Tableau to investigate data requests from journalists.
- Leading a team in analyzing online misinformation relevant to elections, COVID-19 and other controversial topics.

PROJECTS

DGA detection using XGBoost

Apr 2020 - June 2020

- Built an application classifying DGA and benign domain names using AWS Lambda, S3, API Gateway, and SageMaker.
- Generated a dataset of 5 million rows using more than 40 domain generation algorithms and other data sources.
- Used XGBoost for classification and hyperparameter tuning to achieve a testing accuracy of about 93%.

Movie Review Classification using Naïve Bayes

Feb 2020 - Mar 2020

- Developed a Naïve Bayes classification model to predict if a movie is 'Fresh' or 'Rotten' based on movie reviews.
- Used NLP techniques, smoothing, and cross validation to achieve an accuracy of 63% on a dataset of 10,000 rows.

Twitter Topic Modeling using LDA

Jan 2020

- Scraped Twitter data relevant to 'Data Science' and used Natural Language Processing techniques.
- Used Latent Dirichlet Allocation (LDA) model to extract the most naturally discussed topics about the field.

Stockopedia - A Stock Recommendation System

Mar 2018

- Built a system using Python recommending stocks to buy and sell to traders as part of the NSE FutureTech Hackathon.
- Analyzed financial data and calculated stocks' short-term prediction, risk diversification and sentiment score.

Recommendo - A Movie Recommendation System

Sept 2017 - Oct 2017

- Built a web application that recommends movies to a user based on similar movies and user ratings.
- Applied collaborative filtering and k-NN method in Python and built the system UI using HTML, CSS, and JavaScript.

Other: Amazon Product Review Clustering, Furniture Sales Forecasting using ARIMA, Sales Data Warehousing & Analysis, Grocery Store Sales Analysis and Forecasting, Customer Churn Prediction, Titanic Survival Prediction, Speech to ISL converter.

CERTIFICATIONS