Sulman A. Khan

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Skills

Technical

Machine Learning: Classification, Regression, Clustering, NLP, Feature engineering, Dimensional reduction techniques, Recommendation systems

Data Analytics: Cleaning, Manipulation, Scraping, Visualizations

Statistics: Inferential and Descriptive statistics, Bayesian methods, A/B testing

Software

Proficient: Python, SQL (PostgreSQL, MySQL), RESTful API, SaaS, AWS, GCP, Tableau, Docker, Git, Microsoft Office, MATLAB, LaTeX

Familiar with: C/C++, R, Win32, Linux

Work History

Fingercramp LLC., Brooklyn, NY **May 2018 - January 2024**

Data Scientist

- Developed a character balancing model based on historical statistic performance and matchup characteristics, which increased the number of characters used in the 2018 season by 200%.
- Setup and managed a PostgreSQL database to store match statistics for extensive querying involving multiple joins between tables and schemas.
- Designed viewership feedback surveys that were completed by 50,000 users adhering to A/B testing design methodologies.
- Produced data visualization dashboard assets for the streaming platform in which viewership attained a 48% increase in max concurrent viewers.

Personal Projects

eBay: Phone Auction Aide **Fall 2020**

https://github.com/SulmanK/eBay-web-crawler-phone-auctions

- Built a customized Python-based web scraper for gathering phone auction data from eBay.
- Leveraged workflow services to assist in automating data collection and maintenance of a PostgreSQL database, increasing throughput by 25%.
- Deployed an application where users can observe the phone auctions listed and calculate various metrics to aid in auction selection.

Video Game Recommendation Engine **Summer 2020**

https://github.com/SulmanK/Video-Game-Recommendation-Engine

- Developed a Python-based parsing tool to aggregate video game data from the Giant Bomb API and store entries into a PostgreSQL database.
- Employed NLP algorithms such as TF-IDF vectorization and cosine similarity to create a content-based recommendation system for providing video game recommendations.
- Deployed an application where users can input video game titles to produce video game recommendations with visualizations.

Predicting Customer Churn in World of Warcraft **Spring 2020**

https://github.com/SulmanK/Customer-Churn-in-World-of-Warcraft

- Analyzed time-series user data during a one-year period applying exploratory data analysis techniques to identify pertinent features for predicting customer churn across a six-month period.
- Explored survival analysis techniques such as Kaplan-Meier estimator to gain insight into the relationship of features selected.
- Examined the performance of classification algorithms by applying Receiver Operating Characteristics (ROC) metrics with the highest scoring algorithm achieving a 96% ROC-AUC score.
- Deployed an application where users can input data for churn predictions and provides recommendations to reduce the risk of churning.

Education

Stony Brook University, Stony Brook, NY **May 2018**

Masters of Science, **Electrical Engineering** Cumulative GPA: **3.45/4.00**

Relevant Coursework:

· Detection and Information Theory · Distributed Systems and Networks · Linear Systems · Machine Learning · Probability and Stochastic Processes

Virginia Polytechnic Institute and State University, Blacksburg, VA **May 2016**

Bachelors of Science, **Materials Science and Engineering** Cumulative GPA: **3.30/4.00**