JOSHUA SABHERWAL

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EDUCATION

The University of Michigan, Ann Arbor, MI
B.S. in Data Science Engineering *May 2022*
GPA: 3.90/4.00
Activities & Clubs: Collegiate Soccer Society (*Former President*), Michigan FinTech, STEM Society, Michigan Parliamentary Debate

Relevant Coursework Data Mining, Web Systems, Database Management Systems, Data Structures, Algorithms, Regression Analysis, Linear Algebra, Multivariable Calculus, Statistics and Probability

Software & Tools HTML, CSS, C++, JavaScript, Python, Pandas, Scikit-Learn, Selenium, NodeJS, TensorFlow, Keras, Tableau, NetSuite, PostgreSQL, AWS (Storage, Database and Analytics services)

EXPERIENCE

Blue Yonder, *Data Science Intern* *May 2021 – Aug 2021*
- Implemented and designed data-driven solutions for global sales division to forecast a CE's close rate accuracy up to 2 quarters ahead and increase opportunity visibility by preprocessing large volumes of data, engineering features, and building a pipeline for an internal opportunity scoring supervised machine learning model to make predictions accurately
- Used Google, Twitter and LinkedIn API's to scrape competitor intelligence, prospect activities, and identify whitespace on net new and current accounts with cross-sell potential using multi-class classification techniques to generate better pipeline for CE's

Formlabs, *Data Analyst Intern* *June 2020 – Aug 2020*
- Worked for a leading 3D printing company incubated in MIT Media Lab to automate build and deployment using Jenkins and Kubernetes for export of daily entries of customer data on Magento and Dialpad via Python scripts. Further used AWS S3 and Athena for the storage and migration of data to Tableau dashboards
- Architected and implemented end-to-end data pipeline to process and analyzed shipment issues using PostgreSQL and highly optimized, parallelized Python scripts, thereby improving customer experience

Michigan Data Science Team, *Project Lead* *Jan 2020 – May 2020*
- Achieved an accuracy of 79.2% by engineering a KNN classification model to categorize food items into healthy and non-healthy buckets, helping students make an informed choice about their meals
- Built a linear regression model yielding 84.7% accuracy to predict the nutritional values of newly introduced items to enable dining halls to list nutritional information for items more accurately and easily

Accenture, *Data Analyst Intern* *May 2019 – July 2019*
- Analyzed and processed historical data of customer complaints to create region-wide action plans to reduce RTO complaints by 30% for one of biggest motorcycle manufacturers in India
- Created interactive dashboards utilizing Tableau and Excel to provide key understandings of sales and service complaint data

University of Michigan, *Programming Tutor* *Jan 2019 – May 2019*
- Successfully diagnosed curricular weaknesses for a class of 800+ students in C++ and Python, achieving a feedback score of 95%

PROJECTS

Surveyor
- Developed a full stack web application using NodeJS, React, Redux and MongoDB that allows users to send custom surveys, track their responses using Webhooks, and analyze the feedback/response through visual dashboards
- Integrated the application with the Stripe API to enable payments from the users

Safety Applications for Vehicle Trajectories
- Worked in the Next Generation Transportation Systems Lab under Dr. Neda Masoud researching unsupervised machine learning methods to detect rash driving using data from connected vehicle trajectories
- Pre-processed data from vehicles and applied TensorFlow Recurring Neural Networks with Keras for object classification from camera sensors of autonomous vehicles

Piazza Post Classifier
- Developed a program in C++ to automatically classify the subjects of Piazza (Q&A web service) posts
- Trained the "Multivariate Bernoulli Naïve Bayes NLP Classifier" model using log-prior probability scores and achieved an accuracy of 87.1% when predicting the subjects of 3000 posts

Movie Recommender System
- Implemented a recommender system with content-based and collaborative filtering on the MovieLens dataset to accurately suggest movies to a user using linear algebra and scikit-learn python library