

JOSHUA SABHERWAL

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EDUCATION

The University of Michigan, Ann Arbor

August 2018 - Present

Data Science & Computer Science Double Major (GPA: 3.82/4.0)

Expected Graduation: May 2022

President: Michigan Soccer Society

Project Manager: Michigan Data Science Team

Member: Michigan FinTech, STEM Society, Michigan Parliamentary Debate

Relevant Coursework

Data Structures and Algorithms, Linear Algebra, Discrete Math, Intro Programming, Calculus, Statistics and Probability, Data Manipulation

Software & Tools

Python, C++, NumPy, Pandas, Seaborn, Scikit-Learn, MS Office, Tableau, SQL, Keras

EXPERIENCE

Accenture, *Data Analyst*

May 2019 – July 2019

- Analyzed historical data of customer complaints to create region-wide action plans to reduce RTO complaints by 30% for one of biggest motorcycle manufacturers
- Created interactive visualization dashboards utilizing Tableau and Excel to provide a key understanding of sales and service complaint data
- Collected and analyzed store-level sales data to build a successful proposal to define growth strategy for largest café chain in India, which included creation of benchmarks against leading global practices

University of Michigan, *Programming Tutor*

Jan 2019 – May 2019

- Successfully analyzed and diagnosed curricular weaknesses for a class of 800+ students in C++ and Python, achieving a feedback score of 100%

Sportskeeda, *Content Writer*

May 2017 – July 2017

- Wrote features, game stories and enterprise pieces on soccer, with emphasis on tactical analysis, for multi-national sports website, collecting 80,000 reads

The Financial Mall, *Business Analyst*

June 2016 – July 2016

- Carried out cost-benefit analysis of customer relationship management versus business customer gives to company across KPI's such as customer lifetime value and segmentation
- Established techniques and advantages of investing in current and future clients, decreasing attrition rate by 17%

PROJECTS

Safety Applications for Vehicle Trajectories

- Working with Dr. Neda Masoud to develop safety-focused applications by mining safety messages data like vehicle location, speed, and braking status to help identify aggressive drivers and safety-critical locations in the transportation network at the University of Michigan

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

House Price Prediction Regression

- Used data visualization, EDA, feature scaling, and engineering to minimize error and maximize accuracy of a house price prediction model in python

Movie Recommender System

- Implemented a recommender system using content-based and collaborative filtering to suggest movies to a user

Image Processing Algorithm

- Implemented a seam carving algorithm, changing aspect ratio while simultaneously not distorting image, to implement content-aware image resizing

Solar Efficiency Expansion

- Suggested and executed a proposal to increase school's energy efficiency including maintenance and expansion of school's solar power plant and widespread installation of efficient lighting techniques