

Mansi Rathod

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"Diligent & passionate to help organizations through strong analytical thinking & sharp business acumen. With 3+ years strong foundation in statistics & machine learning, proficiently translates business problems into data science solutions"

EDUCATION

[University of Washington](#) | Seattle, WA, USA Sep 2019 - Mar 2021(Exp)

Master of Science in Data Science (MSDS) | GHC Student Scholar for 2020 **GPA: 3.87/4.0**

Coursework: Machine Learning, Statistic, NLP, Statistical Analysis & Experiments, A/B Testing, Data Visualizations

Teaching Assistant: Statistics & Probability for Data Scientists (MSDS's fundamental subject)

[National Institute of Technology](#) | Raipur, India Jul 2012 - May 2016

Bachelor of Technology in Information Technology | 3rd Rank in class of 90 **GPA: 8.81/10**

Coursework: Data Structures & Algorithms, Databases Management, Neural Networks, Software Design, Data Mining

SKILLS

- **Programming**: Python, R, SQL (SCOPE, PostgreSQL, MySQL), Linux, C++, Java, HTML, CSS
- **Libraries**: Keras, NLTK, Scikit-Learn, Matplotlib, Seaborn, Plotly, Dash, Numpy, Dplyr, RShiny, ggplot2
- **Tools**: Tableau, GitHub, VS Code, PyCharm, Microsoft Azure SQL, AWS EC2, Hive, Docker, MS Excel

WORK EXPERIENCE

[Data Scientist Intern](#) | [Path](#) | Seattle, WA, USA Jul 2020 – Sep 2020

- Led ETL process on large immunization data sets (6M+ rows), data imputation & feature-engineering for ML models
- Performed Exploratory Data Analysis (EDA) in R & published Tableau dashboards answering global health question
- Built mixed-effect GLM model to identify impact of different covariates; Designed a Logistic regression model to predict missed opportunities of vaccinations at child and visit level for African countries

[Business Analyst](#) | OYO Rooms | Gurugram, India May 2017 - Dec 2018

- Designed an incentive model in R to align around 2000 sales managers with monthly target achievement of \$8 M; Received 'Above & Beyond Call of Duty' award for improving profit ratio by 30% & incentive calculation time by 60%.
- Accomplished demand diversion to low occupancy hotels by updating hotel recommendation algorithm; Created live tracking dashboard using SQL & Tableau which retained 600+ hotel properties from churning.

[Data Scientist](#) | MuSigma Inc. | Bengaluru, India Sep 2016 - Apr 2017

- Built a random forest model (R) for real-time prediction of viral events from Twitter. Leveraged client's Search Engine Marketing (SEM) platform to generate actionable insights such as targeting suggestions for advertisers.
- Developed methodology to classify user search queries into correct business verticals using TF-IDF and LDA Text Analytics Techniques. Automation with R saved 3+ hours of weekly user search queries mappings.

ACADEMIC PROJECTS

[Estimating Impact of Asymptomatic Patients in spread of covid-19](#) | Research Assistant Jun 2020 – Sep 2020

- Programmed Agent Based Model 'Corvid' on AWS to generate multiple population effects with probability sampling
- Spearheaded calibration values for Basic Reproduction Number (R0) & proportion of asymptomatic patients

[Movie Recommendation System \(RS\) for Netflix](#) | [Kaggle](#) | [Link](#) Mar 2020 - Apr 2020

- Devised Recommender System (Python) based on 500k Netflix users using collaborative filtering & cosine similarity.
- Produced a user interface to suggest content based on genre & time using Dash (Python) & deployed it on Heroku.

[Document Classification using Natural Language Processing & Deep Learning](#) | [Link](#) Jan 2020 - Feb 2020

- Constructed Convolutional neural networks model to classify text into 4 categories using TF-IDF & word embedding; Applied randomized grid search & K fold cross validation for hyperparameter tuning & achieved 92% accuracy.

[Vehicular Injury Prediction Model for New York City Traffic](#) | [Link](#) Dec 2019 - Jan 2020

- Modeled hypothesis tests, deviance & multi-collinearity tests to estimate association of 19 features in road-collision; GLM Logistic regression model found 70% high risk for pedestrian & 92% risk for motorist among all victim types.