

Mohini Rana

Data Analyst | Data Scientist | Software Engineer

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SUMMARY

Data scientist with 4 years of experience skilled in data analysis, modeling, and machine learning. Proficient in Python, SQL, and Tableau, delivering impactful solutions across global teams. Expert in multiple business lines, driving strategic decision-making.

SKILLS

Programming Languages: Python, PL/SQL, HTML, CSS, Javascript

Python Libraries: Requests, Pandas, Matplotlib, scikit-learn, NumPy, PySpark, TensorFlow

Software / Methodologies: Tableau, AWS, Qualtrics, Git, Jira, Agile, Test-Driven Development, SDLC, Google Analytics, Excel

Data Skills: Data Wrangling, Manipulation, Modelling, Visualization, ETL Pipelines, Warehousing, Big Data, Hadoop, Spark

Soft Skills: Storytelling, Creativity, Collaboration, Curiosity, Prioritization, Detail-Oriented, Adaptability

RELEVANT EXPERIENCE

Data Engineer Intern, Dolby Laboratories, *San Francisco, CA*

May 2023 - Oct 2023

- Conducted market analysis to identify growth opportunities and success drivers within the industry.
- Developed **HTML/CSS/JavaScript** and **Python** Flask custom web app for identifying growth opportunities. Conducted sentiment analysis, performed location-based frequency analysis, and visualized word clouds, speeding insights generation by **75%+**.
- Led comprehensive analysis of 100+ leading **YouTube** channels, revealing pivotal success drivers. Insights facilitated the creation of a proprietary content analysis tool for Dolby, leveraging **Python & YouTube Data API**.
- Explored potential integration opportunities of built data tool with in-house **Databricks** Data platform and **PowerBI**.

Data Scientist, Bristlecone, *Pune, India*

Jul 2019 - Sep 2021

- Formulated dynamic demand forecasting solution using **Machine Learning**, and external demand factors and curated comprehensive dataset, and automated processes, and collaborated with leadership to secure a successful **\$44B** client.
- Compiled and analyzed large data from diff. sources, conducted **EDA**, and performed pre-processing and cleaning on stakeholders' data in **SQL**. Fine-tuned existing time-series forecasting models improving data modeling.
- Integrated time-series **forecasting** algorithms into the backend pipeline using **Python** improving **SaaS** product performance.
- Seamlessly incorporated APIs within backend systems, effectively integrating spatial data into the product's framework adding additional features, collaborated with senior executives on quantitative analysis, driving business insights.
- Spearheaded **market analysis** for competitor and **SWOT** analysis to support strategic decision-making processes, including competitor analysis and trend identification, presenting compelling visualization dashboards through **Tableau**.
- Improved client ML model accuracy fby **10%** by introducing a new **time-series** model - SARIMAX.
- Earned **Brilliant Beginner** and **SPOT Awards** for contributions driving multiple client acquisitions at Bristlecone.

ML Engineer Intern, DigitalMain Inc., *Pune, India*

Mar 2018 - Jun 2019

- Conducted market research to understand user behavior and preferences for question-answer platforms.
- Developed a Machine Learning Proof of Concept (POC) for question redundancy reduction on platforms like Quora, utilizing Neural Networks, **Deep Learning**, and Natural Language Processing - **NLP**.
- Built and trained **Python ML** models, assessed performance, and selected the best based on accuracy, precision, recall criteria.
- Implemented Neural Network-based (**NLP**) Deep Learning model - **CNN** achieving 82% accuracy and 36% log loss.
- Published Paper - <https://github.com/MohiniRana/My-Profile/blob/main/Survey%20Paper.pdf>

Business Analyst Intern, Vidya Online Services, *Pune, India*

Aug 2018 - Oct 2018

- Produced **BRDs** and **FRDs** for two clients, enabling informed decision-making and created user manuals for two websites.
- Utilized **Agile** Scrum methodology to ensure on-time, budget-compliant software delivery for multiple clients.

PROJECTS

Housing Accommodation Site with A/B Testing: Integrated A/B Testing for custom-built dynamic website, comparing user engagement metrics with 2000+ students, over 30 individual tenants and 10 leasing agents.

Identification of COVID-19 Cases from X-ray Images: Developed Sequential CNN Model using Python with accuracy of **91.9%**.

House Price Prediction: Implemented Linear Regression in Python to achieve accuracy of **86%** on housing price dataset.

Finance Expense Tracker: Developed a Python, SQL, HTML, CSS based web application to track expenses dynamically.

EDUCATION

Master of Science, Computer Science, Santa Clara University, *Santa Clara, CA*

June 2023

Relevant Coursework - Machine Learning, Data Mining, Product Management, Data Structures, Algorithms, Operating Systems

Bachelor of Engineering, Information Technology, University of Pune, *Pune, INDIA*

June 2019

Relevant Coursework - Object Oriented Design, Database Management Systems, AI, Computer Networks, Linux