# MOHINI RANA

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#### SUMMARY

I am a detail-oriented Data Scientist with 2+ years of experience using data pre-processing, and predictive modeling with time series forecasting algorithms to solve challenging business problems in a fast-paced environment. Acknowledged for maintaining a 3.7 GPA while working 19 h/week and carrying a full-course load. Can begin working from April 2023 through CPT.

#### SKILLS

Programming Languages: Python (Pandas, NumPy, Scikit, NLTK), R, C++ Tools: Git, Tableau, JIRA, MS Excel

Databases: MySQL, PostgreSQL Big Data Techniques: Hadoop, Hive, PySpark

**Area of Expertise:** statistical and ML techniques, supervised and unsupervised learning, natural language processing, deep learning, data preprocessing, cleaning, and visualization.

### **EDUCATION**

Master of Science, Computer Science and Engineering

Santa Clara University, Santa Clara, CA

Expected Graduation: June 2023 GPA - 3.5 / 4.0

Relevant Coursework - Machine Learning, Pattern Recognition & Data Mining, Big Data, NLP, Deep Learning

# Bachelor of Engineering, Information Technology University of Pune, Pune, MH

July 2015 - June 2019

GPA - 3.5 / 4.0

Relevant Courses - Database Management Systems, Data Science, Big Data, Machine Learning Applications, Social Media Analytics

#### **PROFESSIONAL EXPERIENCE**

# Graduate Assistant - Pattern Recognition & Data Mining | Santa Clara University | Santa Clara, CA

Sept 2022 - Dec 2022

Assisted the professor in planning assignments on various algorithms, Machine Learning and Deep Learning. Worked with students and mentored
them to resolve their queries in academics, curriculum, and providing feedback.

# Student Assistant | Santa Clara University | Santa Clara, CA

Nov 2021 - March 2022

- As a Data Analyst, I worked with the Program Managers at the Miller Center for Social Entrepreneurship to analyze a few datasets extracted using Salesforce, implemented and maintained the databases, gathered data from a secondary source - LinkedIn, and conducted a thorough analysis of potential mentors and presented a curated list of the most qualified individuals for the Miller Center for Social Entrepreneurship's mentor-mentee cohort program, based on their expertise, skills, and experience level.
- Helped speed up the process of assigning mentors, thus saving time by at least 2-3 days and improving the efficiency of the overall process.

# Data Scientist | Bristlecone | Pune, India

luly 2019 - Sept 2021

- Collected data from various sources to identify features, performed data preprocessing and cleaning, implemented time-series forecasting
  algorithms and integrated them into the backend pipeline.
- Collaborated with team lead and manager to determine technical requirements and curated a comprehensive dataset to automate processes, resulting in a successful partnership with a **\$44B client**.
- · Conducted competitor analysis to understand our organization's and its competitors' strengths and weaknesses.
- Led the initiative to improve the accuracy of existing models by introducing a new ML model SARIMAX for one of the clients resulting in a 10% improvement in accuracy from an initial 78% to 88%.
- Developed a responsive demand forecasting solution using Al-powered ML algorithms considering external and internal demand factors.
- Actively engaged in quantitative analysis with team lead and manager to address business issues and improve model accuracy.

# ML Engineer Intern | DigitalMain Inc. | Pune, India

March 2018- June 2019

- Built a Proof of Concept for an AI-ML project on the topic Similar Question Identification using Neural Networks and Deep Learning.
- Built an ML model after trial and testing different models by experimenting with various models, evaluating their performance, and selecting the best one based on criteria such as accuracy, precision, and recall. The accuracy was above 82% (highest) and a reduced log loss of 36% (lowest) for the CNN Model. https://github.com/MohiniRana/My-Profile/blob/main/Survey%20Paper.pdf

# Business Analyst Intern | DigitalMain Inc. | Pune, India

March 2018- June 2019

- Created Business Requirement Documents (BRD) for two clients, which aided in informed decision-making by senior BAs and project managers.
- Applied Agile methodologies such as Scrum and Lean to improve project management and increase customer satisfaction, resulting in on-time and budget-compliant software delivery.

# **AWARDS & RECOGNITIONS**

Received **Brilliant Beginner Award** just 6 months after joining Bristlecone and a **SPOT Award** for my contributions to projects leading to the signing of the \$44B client.

#### LEADERSHIP EXPERIENCE

Volunteer, Discipline Head, Technical Head, Technical Secretary - Undergrad College Fest - Alacrity (2015-2019), General Secretary - First-Year Dept. (2015), Treasurer - IT Engg Dept. (2019), Treasurer for Swades - Indian Community organization during my Master's Program(2022)

**Volunteer Work**: Cleanliness drive, solid waste management awareness drive, fort conservation (2018), taught non-profit organization children English language during Covid (2019)

# **ACADEMIC PROJECTS**

Machine Learning: K-means Clustering Algorithm using Python (Mar 2022)

Big Data: House Price Prediction Linear Regression, Random Forest using Python (May 2022)

Pattern Recognition & Data Mining: Logistic Regression, SVM, Decision Tree, Text Mining, Hierarchical Clustering, PCA using R (May 2022)