RACHNA PATIL

+91 8793993823
2K24/DSC/27
prachnapatil@gmail.com
Github | **LinkedIn**

EDUCATION

M.TechH(Data Science)	2024-2026	Delhi Technological University, New Delhi	8.08
B.Tech. (Information Technology)	2017-2021	Madhav Institute of Technology & Science, Gwalior, M.P	70.4 %
Maharashtra State Board (Class XII)	2017	St.Paul Nagpur, Maharashtra	67.54 %
AISSCE/CBSE (Class X)	2015	DPS Digboi, Assam	7.6 CGPA

WORK EXPERIENCE / INTERNSHIPS

Software Engineer, HCL, Nagpur |LINK October 2021 – 2024

- Ensured stability of MyView and global financial applications through root cause analysis, SQL debugging, and issue resolution.
- Collaborated with backend teams (MQ, Oracle, Cloud) for seamless data flow and infrastructure fixes.
- Led disaster recovery automation and coordinated failovers with DB/Network teams.
- Monitored system health using AppDynamics and Splunk, optimizing EOD/SOD batch jobs.
- Managed deployments, authored SOPs, and coordinated with QA, PMO, and vendors for incident resolution and enhancements.

ACADEMIC PROJECT LINK

Text Summarization Using NLP and Deep Learning| Python | LINK

- Built a text summarization system capable of generating concise summaries from lengthy texts using state-of-the-art NLP techniques.
- Implemented both extractive and abstractive approaches using **Seq2Seq models** with **attention and transformer-based models(Large Language Model)** like **BERT and T5.**
- Preprocessed text using **tokenization, stopword removal, and lemmatization**, followed by sequence padding for uniform input.
- Trained models on datasets like CNN/DailyMail, and evaluated performance using **ROUGE and BLEU metrics.**
- Enabled efficient information consumption and improved readability for long-form content through AI-generated summaries.

Infant Cry Detection Using CNN | Python | LINK

- Developed a **CNN**-based **supervised learning model** to classify infant cries from audio signals.
- Extracted key sound features to improve detection accuracy and assist in early infant care.
- Enhanced model performance through **data preprocessing** and **hyperparameter tuning**.

Customer-Churn-Prediction | Python | LINK

- Designed and developed a **machine learning pipeline** to predict telecom customer churn using structured customer data.
- Performed data preprocessing, **feature engineering**, and handled **class imbalance** using **SMOTE techniques**.
- Implemented **Decision Tree** and **Random Forest** models to identify key churn drivers and evaluate performance using **precision, recall, and F1-score.**
- Visualized churn distribution and customer behavior using seaborn and matplotlib to derive actionable business insights.
- Enabled proactive retention strategy development through predictive analytics.

TECHNICAL SKILLS

LANGUAGE	COURSES/ LIBRARY	TOOLS	IDE
C++, C, **Python**, Oracle SQL	Operating System, DBMS, DSA, **ML, DL, NLP, DPA, Numpy, Pandas, Matplotlib, Seaborn, Tensorflow, PyTorch**	Dynatrace, Splunk, Cloud Controller, ServiceNow Ticketing Tool, Excel, Microsoft Office	Visual Studio, **Jupyter Notebook, Google Collab**

ACADEMIC ACHIEVEMENTS AND AWARDS

- Solved 160+ programming problems, strengthening DSA proficiency.
- 1st place in Regional Badminton and Photography; 1st, 2nd & 3rd place in Nukkad Natak at City and National levels.
- Secured 80% (Elite + Silver medal) in the course Emotional Intelligence(NPTEL) by IIT, Kharagpur.

POSITIONS OF RESPONSIBILITY

- Teaching Assistant under Ms. Priya Singh (Assistant Professor)
- Active member of Rashtraay Nukkad Natak Club, Art Club, CSE & IT Technical Club (ACM), and Holistic & Health Club at MITS, contributing to cultural, technical, and wellness initiatives.

EXTRA-CURRICULAR ACTIVITIES

- **Certifications:** Certified by *The Art of Living*; completed Self-Defense Workshop with 50+ participants (ISTE, MITS).
- **Leadership:** Teaching Head at *Pranyas Foundation (Gwalior)*, led 10+ volunteers and impacted 200+ students.