

# Sahil Patel

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Location: Surat, Gujarat | Contact: +91 6359077957

## Objective

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Data-driven Analyst skilled in Power BI, Tableau, SQL, Python & certified in Oracle Analytics Cloud. Proven experience optimizing data models to reduce dashboard load time & conduct sales analysis using SSMS. Expertise spans ETL, Generative AI, predictive modeling, leveraging business intelligence solutions to drive strategic growth & organizational efficiency.

## SKILLS

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**Data Science & Analytics:** Oracle Analytical Cloud, Power BI, Tableau, SQL, Excel, Python, Data Visualization, DAX, ETL (Extract, Transform, Load), Machine Learning, Data Analytics, Generative AI, RAG, Agentic AI

**Libraries:** NumPy, Matplotlib, Pandas, Seaborn, Keras, TensorFlow, MobileNetV2, Scikit-learn

**Design Tool:** Canva, Figma

**Soft Skills:** Leadership, Creativity, Management Skills, Negotiation, Communication, Collaboration, Adaptability, Productivity

## WORK EXPERIENCE

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### J Mehta & Co

*Data Analyst*

**Surat, Gujarat**

*May 2025 – Aug 2025*

- Assisted in building Excel-based tools, formulas to support daily business operations & reporting needs
- Gained hands-on experience in automating routine data processes to enhance efficiency & accuracy

### Cognifyz Technologies

*Power BI Intern*

**Chennai, Tamil Nadu**

*June 2024 – July 2024*

- Created interactive dashboards to visualize complex datasets, delivering actionable insights for business decision-making
- Optimize Power BI data models by developing efficient relationships & DAX measures, resulting in a 25% reduction in dashboard load time

## PROJECTS

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### AI SQL Agent

- Users can ask business questions in plain English, which it intelligently translates into SQL queries & executes against a connected database, eliminating the need to write raw code
- Supports major SQL databases (MySQL, can be upgraded as required) & outputs results in various formats suitable for analysis, including structured tables, CSVs, & JSON
- Uses a distinct architecture (Translator, Executor, Formatter) designed for stability, featuring safe query parameterization, logging, error handling, & easy integration into dashboards or apps
- Requiring Python 3.8+, the tool is easy to configure via YAML or .env files to manage database connection strings, timeouts, & optional LLM API keys

### RAG AI Model

- Designed for enterprise use rather than just research, featuring structured logging, error handling, scalable modular layers (Retriever, LLM Handler), & integration via Fast API/Flask API servers
- Utilizes Google's Gemini 2.5 Pro (can upgrade to latest model) model to generate grounded, multimodal responses (text & images), significantly reducing hallucinations by anchoring answers in real data retrieved from a private knowledge base
- Key parameters such as API keys, database paths, and model names are managed via environment variables, while the system supports various vector databases (Chroma, Pinecone) & deployment environments (Docker, AWS, Google Cloud)
- Follows a strict path from user query to API, Retriever, Vector Store, & finally the LLM, ensuring context-aware answers that can be accessed via standardized endpoints like /query and /ingest

### Sales Performance Analysis Using AdventureWorksDW2022

- Series of SQL queries specifically developed for the AdventureWorksDW2022 database environment
- Microsoft's sample data warehouse, which serves as a standard model for demonstrating data warehousing architecture & business intelligence solutions
- The primary goal is to leverage this data to answer key business questions, evaluate performance metrics & identify underlying trends

## Adventure Works Report

- Features a robust sales dashboard built on the Microsoft Adventure Works sample database to visualize & track core business performance metrics
- Provides granular insights into revenue generation, breaking down sales performance by time, product category, subcategory & geographical region, alongside customer demographic trends
- Designed for dynamic user engagement, utilizing interactive slicers & filters that allow stakeholders to drill down into specific data points & customize their view
- Developed using Microsoft Power BI Desktop & Power Query, demonstrates expertise in Data Modeling, ETL (Extract, Transform, Load) processes & advanced DAX calculations

## Gender Classification Model

- Employs MobileNetV2 pre-trained on ImageNet to perform binary gender classification (Male/Female), utilizing transfer learning to efficiently extract features from facial images
- Custom directory-organized dataset by resizing images to 224x224 pixels & applying robust data augmentation (rotation, shifts, zooms, flips) to enhance model generalization & prevent overfitting
- Custom layers to the frozen MobileNetV2 base, including GlobalAveragePooling2D & 1024-unit Dense layer, culminating in a sigmoid activation function optimized via the Adam optimizer
- Achieves 90.62% accuracy on the test set after 30 epochs & offers a production-ready workflow with options to persist trained weights (.h5) & execute single-image inference

## Sentiment Analysis Model

- Implemented a complete neural network pipeline that processes data through an Embedding layer, LSTM (Long Short-Term Memory) layer & Dense output layer to classify news headlines as either sarcastic or literal
- Curated dataset (sarcasm dataset) & standardizes inputs by retaining top 5,000 tokens & padding text sequences to a fixed length of 100 tokens to ensure consistent model performance
- Orchestrates TensorFlow/Keras for model training & serialization, alongside NumPy & scikit-learn for data manipulation & evaluation
- Achieves test accuracy of 83.75% (on 80/20 split) & includes a production-ready workflow with scripts for training, model exporting & external inference

## **EXTRACURRICULAR ACTIVITIES**

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### **Directorate of Student Affairs (DSA), SRMIST**

*Domain Secretary of Tech & Graphic Design*

**Chennai, Tamil Nadu**

*September 2025 – Present*

- Leading a 40-member Technical & Design team, serving as the primary tech lead for the event
- Overseeing the deployment & management of the event website & associated technical requirements
- Ensuring timely delivery of design & tech assets through effective collaboration with other student bodies & departments

## **EDUCATION**

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### **SRM Institute of Science and Technology (SRMIST)**

*Bachelor of Computer Application in Data Science (CGPA: 8.7)*

**Chennai, Tamil Nadu**

*July 2023 – Present*

## **Certificates & Achievements**

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- Achieved [Oracle Analytics Cloud 2025 Certified Professional](#) from Oracle
- Completed [Business Intelligence Analyst](#) certification from Udemy
- Earned [Cognos Analytics](#) certification from IBM Developer Skills Network
- Earned [AWS Academy – Generative AI Foundations](#) badge by SRMIST
- Completed [Power BI](#) certification from Udemy
- Completed [Tableau](#) certification from Udemy
- Completed [Python](#) Certification from Udemy
- Earned [SQL \(Intermediate\)](#) certification from HACKERRANK
- Completed [Power BI Job Simulation](#) from PwC Switzerland / Forage
- Participated in NASA International Space Apps Challenge 2024
- Won College Photography Competition Award
- Achieved Gold Medal in Mathematics (2<sup>nd</sup> semester) for scoring ‘O’ Grade