SAYALI SANJAY CHOUGULE

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PROFESSIONAL SUMMARY

Data Scientist with over 4 years of experience driving business value by transforming raw data into actionable insights. Proficient in designing data pipelines, building dashboards, and deploying scalable ML solutions on Azure and AWS. Effective in cross-functional collaboration and stakeholder engagement, delivering insights through data storytelling to support critical decisions.

TECHNICAL SKILLS

- **Programming Languages & Frameworks:** Python, Java, SQL, Shell Scripting, Hugging Face Transformers, MATLAB
- **ML Framworks :** Pandas, Numpy, Scikit-ilearn, Pyspark, Tensorflow, MatplotLib, Seaborn
- **Machine learning & Statistics:** Regression, Classification, Clustering, Predictive Modelling, Pattern Recognition, Time Series Forecasting
- **Tools & Workflow Management:** Jira, Git, Agile, Postman, Jenkins
- **Database Management:** MySQL, MS SQL Server, PostgreSQL, MongoDB, Neo4j
- **Data Analytics & Visualization:** Exploratory Data Analysis, ETL, Power BI (DAX, Power Query), Tableau, Excel (Pivot Tables), Statistical Analysis, Microsoft Excel, PowerPoint, and Word
- **Cloud Platforms & Deployment:** Microsoft Azure, AWS (S3, EC2), Docker, Kubernetes, GCP

WORK EXPERIENCE

Data Science Intern │ Nexerios Corp (New Jersey, USA)   Sept 2025 – Present
- Built and maintained data pipelines for EV charging data, user behavior, and operational metrics with robust cleaning, preprocessing and validation.
- Developed and evaluated machine learning models for demand forecasting, dynamic pricing, and anomaly detection to improve operational decision-making.
- Designed scalable ML pipelines to streamline model deployment and performance optimization.
- Created interactive dashboards and visualizations using Power BI, Tableau, and Python to deliver actionable business insights.
- Researched and prototyped advanced techniques, including LLMs, generative AI models, and optimization methods, to enhance EV charging intelligence.
- Collaborated with leadership and technical teams to align data science projects with business objectives.

Course Assistant (Data Science Club) | Drexel University (Philadelphia, USA)   Sept 2025 – Jan 2026
- Led the Data Science Club, fostering student engagement and collaboration.
- Organized datathons, hackathons, guest lectures, and workshops to enhance learning and industry exposure.
- Provided academic support, addressing student doubts and guiding projects.
- Coordinated interactive events and activities to build a strong data science community.

Data Analyst | Tata Consultancy Services (Pune, India)   Oct 2021 – Sept 2024
- Developed and deployed interactive dashboards in Tableau and Power BI, enabling data-driven decisions across 5+ cross-functional teams and reducing manual reporting efforts by 60%.
- Performed comprehensive data validation, cleansing, and preprocessing using Python (Pandas, NumPy) and SQL to ensure high-quality datasets for advanced analytics
- Optimized complex SQL queries and ETL pipelines, improving data retrieval speed by 40% and supporting scalable analytics workflows.
- Designed and implemented improved data collection strategies, increasing the availability and granularity of data for predictive modeling.
- Automated monthly reporting processes using Excel (Pivot Tables, VBA) and Python scripts, saving 15+ hours per reporting cycle.
- Enhanced data visualization and storytelling by integrating machine learning insights, boosting reporting accuracy.

ACADEMIC PROJECTS

Data-Driven Supply Chain Analysis for Business Efficiency   Mar 2025 – Jun 2025
Skills: ML, Pandas, Scikit-learn, SQL, Power BI,Tableau
- Built ML models (regression, time series) for demand forecasting and inventory optimization.Utilized Python, SQL, and Power BI for predictive analytics and interactive dashboards.Developed visual dashboards to track demand, inventory, and logistics performance.

Deep Learning Based Pneumonia Detection from Chest X-ray Images   Mar 2024 – Jun 2024
Skills: Computer Vision, CNNs, ResNet, VGG16, TensorFlow, Keras, Pytorch, OpenCV, Flask
- Developed a deep learning pipeline with CNN, ResNet, and VGG16 models for pneumonia detection from chest X-rays, incorporating preprocessing techniques (normalization, augmentation) to enhance model performance and achieving 93% validation accuracy with a 15% reduction in false positives, deployed via Flask REST API for real-time diagnostics.

EDUCATION

Master of Science in Data Science, Drexel University | GPA: 3.96/4.0   Expected Graduation – June 2026
Relevant Coursework: Data Structure and Algorithm, Data Analysis, DBMS, Cloud Computing, Machine Learning, NLP with Deep Learning
Bachelor of Engineering in Civil, Shivaji University | GPA: 3.9/4.0   May 2021

CERTIFICATION

- **Microsoft AzureAZ-400**   • **AWS Cloud Practitioner**