

SUMMARY

Data Science / AI/ML Engineer / Gen AI Enthusiast with 2 years of hands-on experience in machine learning and data analytics. Skilled in Python, Scikit-Learn, TensorFlow, Power BI currently pursuing M. Tech in Data Science and Machine Learning and driving AI solutions through Hackathons and real world projects.

TECHNICAL SKILLS

Programming & Libraries: Python 3.0, NumPy, Pandas, Matplotlib, Scikit-learn, Seaborn

Machine Learning & AI: Deep Learning, Neural Networks, NLP, TensorFlow, Keras, Transfer Learning

Databases & Analytics Tools: MySQL, Power BI, MS Excel, MongoDB, firebase, firestore

Deployment & Cloud: Flask, Streamlit, Docker, Git, GitHub Actions, Google Cloud

Professional Skills: Team Leadership, Collaboration, Problem-Solving

EXPERIENCE

Capgemini Engineering

Associate Engineer – II

May 2023 - Present

Bangalore, Karnataka

Transitioned into Data Science initiatives alongside engineering responsibilities.

- Delivered high-quality machine learning models and data pipelines, improving model accuracy by 20%, validated through stakeholder feedback.
- Streamlined execution of analytics projects using Python (Pandas, NumPy) and MySQL, achieving 100% on-time delivery with efficient resource planning.
- Coordinated with cross-functional teams to integrate ML workflows into business processes, improving efficiency by 30% and reducing turnaround time.
- Produced actionable insights via Power BI dashboards and Matplotlib/Seaborn visualizations, earning client recognition for data-driven decision support reducing manual efforts by 40%.
- Managed multiple AI/ML initiatives end-to-end (data preprocessing, model training, deployment with Flask/Streamlit + Docker), ensuring smooth collaboration and timely delivery

Sutra Systems India Pvt. Ltd.

Design Engineer

Nov 2021 - May 2023

Pune, Maharashtra

- Responsibility to handle huge assemblies and systems (Electrical, water piping & air routing, cooling) and installation, GA drawings of Galley, stowage and palmet, for Airbus A330, A320, A380 and Boeing
- Creating 3D modeling and Drafting of sheet metals and other milling parts models.
- Creating drafting and Model Based Definitions (MBD) using 3D software PTC Creo 4.0 and operating Wind-chill PLM Software. Responsibility of doing Engineering Changes and other documentation work.

EDUCATION

Masters in Data Science and Machine Learning

PES University

January 2024 - January 2026

Bangalore, Karnataka

8.5 SGPA

Bachelors in Engineering (Mechanical Engineering)

G.H. Raison Academy of Engineering and Technology (RTMNU Nagpur University)

August 2012 - September 2015

Nagpur, Maharashtra

62.8%

## HACKATHON

### Sahayak AI (Google Cloud Agentic AI Day Hackathon powered by Hack2Skill)

Developed **AI-powered teaching assistant** to support multi-grade classrooms in India, reducing teacher workload and enabling **personalized student learning**.

Designed scalable architecture on **Google Cloud**: Firebase Authentication, Firestore Database, and Cloud Functions.

Integrated **Gemini API + Dialogflow ES** for real-time insights and conversational support.

Built **React dashboard frontend** with secure data access for teachers.

Automated student performance tracking, enabling **40% faster intervention for struggling learners**.

### Predicting Employee Attrition for a Fast-Growing Company

Attrition is a major challenge for organizations globally, especially in fast-growing sectors where high employee turnover can be economically damaging and harm a company's brand value. Developed a machine learning model to proactively predict employee attrition based on a dataset containing various employee attributes. Using this model, the company's HR team can take preventive measures to retain valuable talent.

Built and evaluated models using **Accuracy as the primary performance metric**, defined as  $(TP+TN)/(TP+TN+FP+FN)$ . Where the **RandomForestClassification Model** performs Best among the other models.

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## PROJECTS

### Customer360: Turning Data into Insights for Digital Excellence using Recommendation System

Developed a scalable recommendation system combining **K-Means clustering** for user segmentation and **SVD-based collaborative filtering**, delivering meaningful and context-aware recommendations. Explored multiple models; **hybrid K-Means + SVD pipeline** showed best performance under existing infrastructure. Proposed integration of FAISS (Approximate Nearest Neighbor search) to enable low-latency, large-scale recommendation retrieval. Planned enhancements include **BERT embeddings** for semantic understanding, user feedback mechanisms, and multilingual support for global scalability.

### Forest fire prediction using Logistic Regression and Flask

Forest fires can be predicted effectively using **Logistic Regression**, a binary classification algorithm. By analyzing features like **temperature, humidity, wind speed, and rainfall**, the model predicts fire occurrence. **Data pre-processing** ensures quality, while feature selection focuses on key drivers. The model evaluates performance through **accuracy, precision, and recall**, ensuring reliability. This approach aids in proactive forest management by identifying high-risk scenarios, enabling early intervention. Logistic Regression's simplicity and interpretability make it suitable for this task, offering actionable insights to mitigate fire risks. Combining data-driven predictions with preventive measures supports ecological preservation and reduces the impact of forest fires.

### Real vs Fake Image Detection with Transfer Learning (DenseNet121) using Streamlit

Developed a **Streamlit web app** to classify images as real or fake, utilizing Transfer Learning with the DenseNet121 model. Fine-tuned the **DenseNet121** model for **image classification**, achieving an **accuracy of 68%** in distinguishing real images from AI-generated ones. Implemented an interactive interface that allows users to upload images and receive **real-time predictions** on whether the image is real or fake. Leveraged **Transfer Learning** to enhance model performance and reduce training time, showcasing practical implementation of pre-trained models for specialized tasks.