Manas Kumar Giri

DATA SCIENTIST

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PROFILE SUMMARY

Data Scientist with 3.5 years of experience in Machine Learning, NLP, Generative AI, and Data Engineering. Expertise in building AI-powered solutions, predictive analytics, and MLOps pipelines across Azure, AWS, and GCP. Developed BERT-based sentiment analysis models, Generative AI tools, and predictive maintenance systems, driving efficiency and cost savings. Proficient in Python, TensorFlow, PyTorch, LangChain, SQL, and Big Data technologies. Passionate about solving business challenges through data-driven insights, automation, and scalable AI solutions. Gold Medalist (MCA) and Kaggle MNIST Top 5% achiever (99.81% accuracy).

EDUCATION

Acharya Nagarjuna University, Guntur | 2018-20 Bachelor of Education | CGPA: 8.72/10

SKILLS

Programming Languages: Python (Advanced), SQL

Machine Learning: Scikit-learn, TensorFlow, PyTorch, XGBoost, LightGBM, Statistical Analysis, A/B Testing

Deep Learning: Transformers, BERT, GPT, GANs, LSTMs, CNNs, Attention Mechanisms, Autoencoders

NLP & Generative AI: LLM, Hugging Face, LangChain, OpenAI GPT, NLTK, SpaCy, RAG, Agentic AI, Vertex AI

Data Engineering: ETL Pipelines, Feature Engineering, Spark, Kafka, Snowflake

Cloud Platforms: Azure (ML Studio, Data Factory, Synapse Analytics, Databricks), AWS (SageMaker, Lambda, S3, EC2)

MLOps: Docker, Kubernetes, MLflow, Git, GitHub Actions, CI/CD Pipelines, DVC (Data Version Control)

Visualization: Tableau, Power BI, Matplotlib, Seaborn, Plotly, Alteryx

Databases & Storage: MySQL, Cassandra, NoSQL

Soft Skills: Analytical Thinking, Problem-Solving, Team Collaboration, Stakeholder Communication

WORK EXPERIENCE

DATA SCIENTIST

REGIS SOFT Pvt. Ltd., Pune | June 2022 – May 2025

- AI and NLP Solutions: Developed a BERT-based sentiment analysis model using Azure Cognitive Services, improving accuracy by 25%, leading to enhanced customer satisfaction strategies. Built an NLP pipeline with BERT & SpaCy, achieving 92% accuracy and improving product satisfaction by 15%.
- Generative AI Applications: Created a content generation tool using OpenAI GPT & LangChain, reducing content creation time by 40% and increasing engagement by 20%.
- **Predictive Maintenance:** Designed and deployed a **predictive maintenance model**, reducing downtime by **30%** and saving operational costs.
- Machine Learning & Data Science: Developed a customer segmentation model using K-Means & DBSCAN, optimizing marketing campaigns and improving efficiency by 25%. Conducted A/B testing for product features, providing data-driven insights to enhance user engagement.
- ML Pipeline Optimization: Built scalable ML pipelines in Azure ML Studio & Databricks, reducing lead time by 40%.
- Cloud Integration & Deployment: Led the migration of legacy analytics systems to Azure Synapse Analytics & Data Factory, enabling real-time data processing. Deployed ML models on AWS SageMaker, reducing inference time by 30%.

- ETL & Big Data Processing: Automated ETL workflows, reducing data pipeline latency by 60% and improving efficiency.
- Data Visualization: Created interactive dashboards in Power BI & Tableau for KPI tracking, enabling data-driven decisions and contributing to a 10% revenue increase.
- Collaboration: Partnered with cross-functional teams to integrate machine learning & AI solutions.
- **Key Technologies:** Python, Azure ML, Databricks, PyTorch, TensorFlow, BERT, OpenAI GPT, LangChain, Power BI, Tableau, Azure Synapse Analytics, Azure Data Factory, AWS SageMaker, SQL, NLP, Machine Learning, ETL Automation, Big Data Processing

DATA SCIENCE INTERN

REGIS SOFT Pvt. Ltd., Pune | December 2021 – May 2022

- **Exploratory Data Analysis (EDA):** Conducted in-depth EDA on large datasets, improving model performance by **30%** through informed feature engineering.
- Recommendation Engine: Built and deployed a recommendation engine for e-commerce platforms, enhancing user retention by 20%.
- Sentiment Analysis: Collaborated on a Natural Language Processing (NLP) project, achieving 92% accuracy in analyzing customer feedback.
- Anomaly Detection: Worked on anomaly detection models, identifying 98% of fraudulent transactions in financial data.
- **Interactive Dashboards:** Created **interactive dashboards** using Tableau and Matplotlib, effectively communicating analytical results to stakeholders.
- **Key Technologies:** Python, NLP, Tableau, TensorFlow, PyTorch, Scikit-learn

PROJECTS

Project 1: AI-Powered Sentiment Analysis System

Client: Aretto (Emerging Indian e-commerce brand)

Description:

Developed a real-time sentiment analysis model using **BERT** and **Azure Cognitive Services**, improving accuracy by **25%** and boosting product satisfaction by **15%**.

Responsibilities:

- Fine-tuned BERT with domain data via Hugging Face & Azure ML.
- Built NLP pipeline with SpaCy and deployed via FastAPI.
- Visualized results using Power BI for marketing insights.

Tools: Python, BERT, Hugging Face, Azure ML Studio, SpaCy, FastAPI, Power BI

Project 2: Generative AI Content Automation Tool

Client: Murf AI (AI, Voice Technology)

Description:

Built a content generation tool using **OpenAI GPT** and **LangChain**, reducing manual effort by **40%** and increasing engagement by **20%**.

Responsibilities:

- Created prompt workflows and integrated LangChain.
- Deployed FastAPI-based API linked to CMS.
- Conducted A/B testing for performance tracking.

Tools: Python, OpenAI GPT, LangChain, FastAPI, Prompt Engineering, A/B Testing, Power BI

Project 3: Fraud Detection System for Financial Transactions

Client: Rupifi (Fintech, B2B Payments)

Description:

Built a real-time anomaly detection system for fraudulent transactions, achieving 98% accuracy and reducing financial losses by 35%.

Responsibilities:

- Developed anomaly detection models using Isolation Forest and XGBoost.
- Engineered features with Pandas and PySpark, deployed via Azure ML and FastAPI.
- Visualized fraud alerts with Power BI and automated pipelines with Azure Data Factory.

Tools: Python, Isolation Forest, XGBoost, Pandas, PySpark, Azure Machine Learning, FastAPI, MLflow, Azure Data Factory, Power BI

Project 4: Predictive Analytics and Generative AI for Healthcare Billing

Client: Apollo HealthTech (Healthcare, Digital Health Solutions)

Description:

Created an ML and RAG-based system for patient billing and fraud detection, cutting fraudulent claims by 28% and speeding up billing by 40%.

Responsibilities:

- Built predictive models with RandomForest, LSTM and RAG pipeline with LangChain.
- Deployed via AWS SageMaker with FastAPI, using Pinecone for document retrieval.
- Automated ETL with AWS Glue and visualized insights in Tableau.

Tools: Python, Random Forest, LSTM, LangChain, RAG, Hugging Face, Transformers, Pinecone, AWS SageMaker, FastAPI, AWS Glue, Databricks, Tableau

Project 5: Scalable ML Pipeline and Deployment System

Client: Gong Labs (Sales Tech, Revenue Intelligence)

Description:

Designed and deployed scalable ML pipelines on AWS & Azure, reducing inference time by 30% and ETL latency by 60%.

Responsibilities:

- Built automated pipelines in Azure ML & Databricks.
- Deployed via SageMaker and monitored using MLflow.
- Enabled CI/CD with GitHub Actions.

Tools: Python, Databricks, Azure ML, AWS SageMaker, MLflow, Azure Data Factory, GitHub Actions, PySpark

CERTIFICATIONS & ACHIEVEMENTS

- Full Stack Data Science iNeuron
- Alteryx Machine Learning Fundamentals Certified Alteryx
- **AI/ML Development** GUVI
- **Pro5** Ranked in the top **5%** in Pro5's Machine Learning assessment, showcasing expertise in ML algorithms.
- **Publications:** Published a blog on "Generative AI, ML & DL" on **Medium**.
- **Kaggle MNIST Competition** Achieved **99.81%** accuracy (Top 5% globally).