Bernard Birendra Das

Software Developer | *Kolkata, West Bengal* | *(+91) 798-000-3127* | *@mail* | *@linkedin* | *@github*

Professional Summary

Results-driven software developer with a strong foundation in data science, full stack web development, and DevOps. Experienced in designing and deploying scalable, production-grade solutions using modern frameworks, cloud platforms, and MLOps/DevOps best practices. Adept at collaborating in cross-functional teams, leading feature delivery, and mentoring junior engineers. Passionate about building impactful products, automating workflows, and driving continuous improvement in fast-paced environments.

Awards and Certifications

Foundational C# with Microsoft Developer Certification *September 2023*
AWS Academy Graduate - AWS Academy Cloud Foundations *November 2022*

Technical Skills

Languages: Python, Postgres, MySQL, MS-SQL, R

Machine Learning / Deep Learning: Scikit-learn, TensorFlow, PyTorch, XGBoost, LightGBM, CatBoost, Hugging Face Transformers

Data Engineering: Apache Spark, dbt, Airflow, Snowflake, BigQuery, Databricks, Kafka

MLOps: MLflow, Kubeflow, DVC, Prefect, Docker, Kubernetes, Git, CI/CD

Cloud Platforms: AWS (SageMaker), Redshift, Lambda, GCP (BigQuery), Vertex AI, Azure (ML), Data Factory

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

Other Skills: Data Modeling, Feature Engineering, Experiment Tracking, A/B Testing, Agile (Scrum/Kanban), SOLID, Design Patterns

Experience

Software Developer | *Simplify3x Software Private Limited* | **2 yrs 5 mos** *January 2023 – May 2025*

- Worked on the core product team of SimplifyQA product as a feature owner for PDF Reports and Pipeline Executions modules.
- Designed and implemented RESTful APIs and microservices in Node.js, significantly reducing service response times and improving overall system scalability.
- Developed dynamic, data-driven dashboards using Angular and D3.js, enabling real-time visualization of key performance metrics for business stakeholders.
- Collaborated with product owners, QA engineers, and DevOps to establish a CI/CD pipeline on Azure DevOps, cutting deployment times from hours to minutes.
- Mentored two junior developers through code reviews and pair-programming sessions, fostering best practices and accelerating feature delivery.

Education

CHRIST (Deemed to be University), Bangalore	**PhD in Data Science** | CGPA : –	*December 2024 – present*
CHRIST (Deemed to be University), Bangalore	**Master of Computer Applications (MCA)** | CGPA : 8.66	*June 2021 – June 2023*
St. Xavier's College (Autonomous), Kolkata	**Bachelor of Computer Science Honours** | CGPA : 7.20	*June 2018 – June 2021*
Auxilium Convent School, Barasat	**ISC** | CGPA : 7.12	*June 2016 – June 2018*
Auxilium Convent School, Barasat	**ICSE** | CGPA : 7.64	*June 2004 – June 2016*

Projects

End-to-End ML Pipeline with MLOps | *Kubernetes, MLflow, Airflow, Docker, AWS, FastAPI* *2024*

- Designed and deployed a scalable machine learning pipeline for tabular data, automating data ingestion, model training, and deployment using Airflow, MLflow, and Docker on AWS EKS.
- Implemented CI/CD for model retraining and versioning, with automated monitoring and rollback using MLflow and Kubernetes.

LLM Fine-Tuning and Deployment | *Hugging Face, Transformers, FastAPI, Streamlit, GCP* *2024*

- Fine-tuned open-source LLMs (e.g., Llama 2, Falcon) on domain-specific datasets using Hugging Face Transformers and deployed as RESTful APIs with FastAPI.
- Built an interactive Streamlit app for real-time inference and integrated with GCP Vertex AI for scalable serving.

Real-Time Data Analytics Platform | *Kafka, Spark, Snowflake, Power BI* *2023*

- Developed a real-time analytics platform for streaming financial data using Apache Kafka and Spark Structured Streaming.
- Automated ETL pipelines to Snowflake and built interactive dashboards in Power BI for business insights.

Computer Vision for Defect Detection | *PyTorch, OpenCV, TensorFlow, AWS Sagemaker* *2023*

- Built and deployed deep learning models for automated defect detection in manufacturing images, achieving 95%+ accuracy.
- Leveraged AWS Sagemaker for scalable training and inference, and OpenCV for image preprocessing.

Recommendation System at Scale | *BigQuery, TensorFlow, Scikit-learn, Flask API* *2022*

- Engineered a collaborative filtering and content-based recommendation engine for e-commerce, processing millions of records in Google BigQuery.
- Served recommendations via a Flask API and monitored performance with custom analytics.

Time Series Forecasting for Business | *Prophet, ARIMA, DVC, Azure ML* *2022*

- Implemented time series forecasting models (Prophet, ARIMA) for sales and demand prediction, with experiment tracking using DVC.
- Deployed models to Azure ML for automated retraining and reporting.

NLP Pipeline for Sentiment Analysis | *spaCy, NLTK, BERT, GCP Vertex AI* *2021*

- Developed an end-to-end NLP pipeline for sentiment analysis on social media data, leveraging spaCy, NLTK, and BERT embeddings.
- Deployed scalable inference on GCP Vertex AI and visualized results with custom dashboards.