Aishwarya Jauhari Sharma Data Scientist

⦿ Magdeburg, Germany ✉ aishwarya.jauhari@icloud.com 📞 +49 15730249290 in LinkedIn ⦿ GitHub

📄 Residence Permit (Dependent) – Work Permitted

Skills

Data Science: Statistical Analysis, A/B Testing, Feature Engineering (PCA, Multicollinearity), Predictive Modeling (Classification, Regression, Clustering), Data Visualization

Machine Learning & AI: Generative Models (LLMs, RAG, GANs), Deep Learning (CNNs, Transformers, Autoencoders), Decision Trees, Random Forest, XGBoost, Time Series Forecasting, Model Training & Evaluation, Debugging & Deployment

Tools: Python (PyTorch, sklearn, numpy, pandas, matplotlib, statsmodel), SQL, Git, Docker, GitHub Actions, FastAPI, Streamlit, MLflow, GCP (Cloud Run), Pydantic, LlamaIndex, HuggingFace, Vector Databases (PGVector, AstraDB), PyMuPDF

BI & Project Management: Tableau, Google Data Studio, Google Analytics, Confluence, Jira

Work Experience

Career Break Sep 2024 – present │ Magdeburg, Germany

Took a break for health and personal reasons. Currently upskilling with cloud certification (GCP Data Practitioner) and GenAI projects.

Research Associate - Machine Learning, Fraunhofer FHR Aug 2022 – Aug 2024 │ Wachtberg, Germany

- Reduced false positives by 6% in radar image classification by developing and optimizing novel machine learning models.
- Used OCR to extract and preprocess text from radar images, enhancing dataset quality for downstream tasks.
- Enabled efficient knowledge retrieval by building a RAG engine with document parsing to query research papers.
- Automated data processing, model training, and deployment by integrating ML pipelines with CI/CD.

Product Analyst, mobile.de Nov 2020 – Jun 2022 │ Berlin, Germany

- Increased lead generation by 8% through A/B testing, optimizing webpage engagement and enhancing user experience.
- Developed 10+ KPI dashboards in Tableau and built predictive models for customer journey analysis and retention.
- Enabled real-time marketing analysis by collaborating with product and engineering teams to integrate data sources.

Data Scientist, Modelytics Apr 2018 – Dec 2018 │ Bangalore, India

- Boosted risk prediction accuracy by 11% using ML models for financial risk assessment for a US-based mortgage client.
- Achieved a 4% portfolio growth by delivering customer segmentation models for a mortgage client's marketing team.

Software Engineer, Accenture Nov 2016 – Mar 2018 │ Bangalore, India

- Enhanced efficiency and reduced process time by automating manual processes with end-to-end SAP-ABAP solutions.
- Improved system stability by resolving critical failures through root cause analysis and cross-team collaboration.

Education

M.Sc. Digital Engineering, Otto-von-Guericke University Apr 2019 – Oct 2022 │ Magdeburg, Germany

B.E. Instrumentation Technology, Visvesvaraya Technological University Sep 2012 – Aug 2016 │ Bangalore, India

Projects and Publications

- End-to-End PDF Extraction App with JSON/Markdown conversion and LLM-Powered table querying. GitHub ⧉ App ⧉
- Doctract: Document extraction and query tool leveraging Llama2, Vector Stores, and RAG architecture. GitHub ⧉
- End-to-End Energy Price Forecasting pipeline with ML-powered market intelligence. GitHub ⧉
- Deep Learning for Image Segmentation: U-Net with Residual Learning and Attention Mechanisms. Thesis ⧉
- Comparison of Deep Learning Algorithms for Semantic Segmentation in Medical Imaging. Publication ⧉
- Unsupervised anomaly detection in brain MRIs using a compact context-encoding variational autoencoder. Publication ⧉

Achievements

- Recognized for outstanding contributions to client business outcomes at Accenture Solutions Pvt Ltd.
- Certified in multiple innovation and leadership programs focused on strategic problem-solving and design thinking.
- Attended University Defence Research Collaboration (UDRC) Summer School on Signal Processing and Machine Learning.