

Mayank Nagar

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🔗 Portfolio 🔗 LinkedIn



PROFESSIONAL SUMMARY

Data Scientist with 3+ years building scalable ML systems at enterprise scale. Delivered 16x performance improvements and 80% cost reduction through deep learning solutions. Expert in Python, PyTorch, TensorFlow, and cloud architectures with proven ability to drive measurable business impact.

EDUCATION

Hamburg University of Technology, M.S. in Data Science 10/2024 – Present | Hamburg, DE
Relevant Coursework : Advance Machine Learning, AI, Big Data, Statistical Models

Dr. Babasaheb Ambedkar Technology University, 08/2018 – 07/2022 | Lonere, India
B.Tech. in Computer Science and Engineering

SKILLS

Programming: Python, R, C++, SQL

ML/AI: PyTorch, Tensorflow, Scikit-Learn, Computer Vision, Deep Learning

Cloud & Infrastructure: Azure (Data Factory, Blob Storage), Docker, Git, CI/CD

Databases and Big Data: SQL Server, Apache Spark, Kafka, PyFlink, Redis

Data Analytics: Tableau, Power BI, ETL, Data Visualization, Statistical Analysis

WORK EXPERIENCE

Harbour Energy, Data Science Intern 04/2025 – 09/2025 | Barnstorf, Germany
- Developed deep learning pipeline with CycleGAN and FFT achieving 16x super-resolution for micro-CT scans, implementing computer vision and image processing system improving fluid flow simulation accuracy by 85%.
- Built automated ML segmentation models reducing manual analysis time by 80% while maintaining 95%+ statistical confidence for permeability assessments.

Cognizant Technology Solutions

Programmer Analyst (Data Engineering – AIA) 08/2022 – 08/2024 | Pune, India
- Architected scalable ETL data pipelines on Azure services (Data Factory, Storage, SQL Server) processing terabytes of data daily, achieving 30% latency reduction while collaborating with 5+ engineering teams.
- Optimized distributed data processing systems achieving 70-80% data accuracy at scale while implementing data quality frameworks and statistical validation methods across production environments.

Programmer Analyst Trainee (AIA) – Intern 01/2022 – 05/2022 | Pune, India
- Built data analytics dashboards using PySpark and SQL with statistical analysis, increasing decision speed by 30% while reducing data processing errors by 15% through automated validation.
- Collaborated with team to implement data solutions, cutting project turnaround time by 20%.

PROJECTS

Radiation Monitoring System, Big Data Module, TU Hamburg 04/2025 – 08/2025
- Built streaming pipeline with Apache Kafka and PyFlink for real-time radiation data processing.
- Developed full-stack app with React frontend and Flask API and Redis caching with microservices architecture.
- Deployed containerized solution on Azure with three-tier alert system.

Routing Tool for High and Heavy Cargoes, 11/2024 – 03/2025
Siemens Gamesa | TU Hamburg
- Implemented optimization algorithms in Python for oversized cargo routing using graph theory and constraint optimization, extending Yen's algorithm for multi-objective route planning.
- Aided development, testing, and integration of time/distance and permit data.

CERTIFICATES

Data Science Methodology | Machine Learning Specialization | Microsoft Azure Data Fundamentals

LANGUAGES

- German (A2 Learning) - English