

ANIKET PHUTANE

Data Scientist

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[LINKEDIN](#)
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SKILLS

Programming languages:	Python SQL
Machine Learning & Statistics:	Predictive Modeling Monte Carlo Simulation Reliability Modeling Probability Estimation
ML library:	Scikit-learn PyTorch TensorFlow NumPy Pandas
Soft Skills:	Clear Communication Multidisciplinary Collaboration Critical Thinking Experimental Design

EXPERIENCE

Helmholtz Zentrum Berlin – Berlin, Germany Mar 2024 – Ongoing
Data Scientist

- Collaborated with research teams to develop data analysis solutions that improved operational efficiency.
- Implemented advanced data reconstruction techniques, reducing data collection costs by 30%.
- Created prototype models for regression tasks, increasing prediction accuracy by 15% with minimal labeled data.
- Ensured solution reproducibility using Docker and developed user-friendly data analysis interfaces.
- Optimized data processing workflows through statistical methods and advanced augmentation techniques.

E.ON Energy Research Center – Aachen, Germany May 2021 – Oct 2023
Research Assistant

Power Grid Optimization using Multi-agent Reinforcement Learning

- Partnered with stakeholders to understand IT system requirements and propose actionable improvements for multi-agent energy simulations.
- Refined application processes by developing tailored workflows that improved system efficiency by 20%.
- Conducted iterative testing and user feedback evaluations to ensure the optimal functionality of newly implemented tools.
- Customized database processes with **Oracle** integrations, ensuring seamless data flow across energy trading simulations.
- Documented processes and provided post-implementation support, resulting in enhanced user satisfaction.

Predictive Maintenance and Anomaly Detection in Industrial Systems

- Managed PostgreSQL database for time-series data, optimizing data retrieval and processing workflows.
- Developed advanced forecasting models for performance analysis, demonstrating strong system analysis and improvement skills.
- Implemented robust deployment processes using MLflow, DVC, and Docker, achieving 95% result reproducibility.
- Prototyped and tested innovative machine learning solutions for performance tracking and anomaly detection.

BASF – Data Science Consultant Ludwigshafen, Germany Mar 2022 – Sept 2023
(Reliability and Optimization)

- Collaborated with business users to analyze complex datasets, developing predictive models that improved decision-making processes.
- Implemented system optimizations through advanced machine learning techniques, enhancing prediction accuracy by 35%.
- Validated and refined models through comprehensive testing, providing actionable insights to stakeholders.
- Deployed scalable solutions via FastAPI, supporting over 2,000 API calls daily and ensuring smooth data integration.

Vodafone - Data Scientist Pune, India July 2020 – Dec 2020

- Developed statistical models, including hypothesis testing and correlation analysis, to identify key patterns in cumulative spending data across 45 countries.
- Built interactive dashboards for real-time anomaly detection and failure trend analysis using business intelligence tools, enhancing operational efficiency.

Teras Energies - Data Science Analyst Mumbai, India July 2018 – June 2020

- Analyzed business requirements to develop targeted forecasting models for wind turbine operations.
- Created real-time dashboards to improve operational efficiency, reducing incident response times by 25%.

- Implemented predictive maintenance solutions that cut maintenance costs by 10% and extended equipment lifespan by 15%.

EDUCATION

RWTH AACHEN UNIVERSITY MSc, Data Science - Transcript	Aachen, Germany 2021 – 2023
MUMBAI UNIVERSITY BE, Computer Engineering - Transcript	Mumbai, India 2014 – 2018

INTELLECTUAL PROPERTY, PUBLICATION

- Patent** - "Prediction of Biodegradation of Small Molecules using Graph Neural Networks"
- Contributed to this patent at BASF (published in 2023) by developing graph neural network models to predict biodegradation potential, enabling data-driven insights for sustainable chemical innovation and enhancing predictive accuracy.
- Publication** - "Get Set Shop" – IJCSIT Best Paper Prize Winner - [Link](#)
- Recognized at the International Journal of Computer Science and Information Technology (IJCSIT) conference for proposing a novel ML-driven framework for e-commerce optimization.

ACHIEVEMENTS

- AWS Certified Cloud Practitioner: [Verification link](#) (Validation number: 510ET7Y1ZBB41694).
 - Gold Medalist: International Olympiad of Mathematics, 2011.
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