

Nikhil Panchal

Stuttgart, Germany

✉ panchalnikhil1710@gmail.com



+49-17669486388



linkedin.com/in/nikhil-panchal-b909b2172/



github.com/NikhilInnovates

SUMMARY

Data Science professional with over 5 years of experience in transforming analytical solutions into production-grade systems using Python, Docker, CI/CD pipelines, and cloud infrastructure. Demonstrated ability to build scalable data pipelines, implement machine learning models, and collaborate across technical and business teams. Currently pursuing a Master's in Data Science with focus on advanced analytics applications. Seeking to apply strong technical foundations and business acumen to deliver high-impact data science solutions in the chemical and consumer goods industry.

EXPERIENCE

Mercedes Benz AG

Stuttgart, Germany

Data Science Working Student & Thesis Researcher

Oct 2023 – Jan 2025

- Developed predictive models using machine learning algorithms, applying best practices in testing, documentation, and deployment to ensure scalability and reliability.
- Built reproducible data processing pipelines using Python and MATLAB/Simulink to analyze vehicle sensor data (temperature, humidity, HVAC), extracting actionable insights that optimized efficiency by 15%.
- Collaborated in cross-functional teams to integrate ML models into existing frameworks, ensuring compatibility and meeting performance standards.
- Conducted comprehensive data analysis across multiple operational scenarios, identifying patterns and resolving critical issues to improve system robustness.
- Created data visualizations and dashboards for effective data storytelling to non-technical stakeholders, supporting knowledge transfer and business decision-making.
- Implemented real-time monitoring solutions using Python and specialized tools, enabling efficient debugging and performance optimization.

SAP SE

Walldorf, Germany

Working Student - Data Analytics

Sep 2022 – Aug 2023

- Supported data processing applications using SQL and programming tools, focusing on test automation, data quality improvements, and system optimization.
- Maintained technical documentation to ensure compliance with internal quality standards, enhancing accuracy and consistency across development workflows.
- Collaborated with business teams to translate requirements into technical solutions, demonstrating strong business acumen and communication skills.

NTT DATA

Bengaluru, India

Software Engineer - Data Solutions

Sep 2019 – Apr 2022

- Collaborated with global stakeholders to gather requirements and optimize SAP BW/HANA data models, applying statistical analysis to improve data quality and reporting accuracy.
- Developed data transformation routines and ETL processes, improving system performance and enabling more sophisticated analytics.
- Participated in code reviews and QA processes to uphold organizational coding standards and ensure maintainability of data processing solutions.

PROJECTS

Time-Series Sentiment Analysis Application

Python, Flask, Docker, AWS, CI/CD

- Engineered an end-to-end machine learning system for time-series sentiment classification: SQL database → Flask API → interactive visualization frontend.
- Containerized application with Docker and deployed on cloud infrastructure (AWS Lambda/API Gateway), demonstrating production-level MLOps capabilities.
- Implemented automated testing and deployment using GitHub Actions, aligning with industry-standard CI/CD practices for scalable data science solutions.

Predictive Analytics Platform

Python, PyTorch, FastAPI, Statistical Modeling

- Built a Transformer-based time series forecasting model using PyTorch, demonstrating expertise in supervised machine learning and deep learning techniques.
- Designed a FastAPI backend with WebSocket streaming to handle real-time data processing, showcasing ability to work with streaming data at scale.
- Applied statistical validation techniques to ensure model robustness and created reusable model artifacts for continuous improvement.

Collaborative Analytics Visualization Tool

Python, Data Visualization, Version Control

- Developed tool to extract, process, and visualize metadata to identify collaboration patterns and development trends.
- Applied data storytelling techniques to transform complex patterns into actionable business insights.
- Utilized Python data processing libraries to handle large datasets efficiently and generate meaningful visualizations.

EDUCATION

Friedrich Alexander University

Erlangen, Germany

Master of Science in Data Science

April 2022 – Present

- Coursework: Advanced Machine Learning, Statistical Modeling, Time-Series Analysis, Data Processing at Scale, Cloud Computing

Dr. A.P.J. Abdul Kalam Technical University

Uttar Pradesh, India

Bachelor of Technology in Computer Science

Aug 2015 – July 2019

GPA: 2.4

TECHNICAL SKILLS

Languages: Python (advanced), R (intermediate), SQL, JavaScript (data visualization)

Tools & Frameworks: Docker, GitHub Actions (CI/CD), AWS, Azure, Git, FastAPI, Spark, MLOps

Data Science: Time-Series Analysis, Machine Learning, Statistical Modeling, Optimization, Data Visualization

Software Engineering: Unit Testing, Code Documentation, Agile Development (Scrum/Kanban)

Business Skills: Requirements Analysis, Data Storytelling, Cross-functional Collaboration, Business Acumen