

MAYOORA NAIR

Machine Learning Engineer

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Location: Ingolstadt, Germany

Visa Status: Authorized to work in Germany

Portfolio: <https://sites.google.com/view/cgp-analysis/project-page>

PROFESSIONAL SUMMARY

A motivated professional with a background in data analysis, machine learning engineering and system development. Skilled in programming, data pipeline automation and various machine learning frameworks. Experienced in developing data-driven solutions that improve system performance and production efficiency. Eager to apply my skills while continuously learning, growing and supporting innovation.

EDUCATION

Master's Degree in Data Analytics

Universität Hildesheim - Hildesheim, Germany | 04/2023 - 03/2026

Exchange Semester (International Experience)

Ostbayerische Technische Hochschule (OTH) - Regensburg, Germany | 03/2022 - 08/2022

Bachelor's Degree in Computer Science

Universiti Putra Malaysia - Selangor, Malaysia | 09/2018 - 09/2022

EXPERIENCE

Infineon Technologies AG - Master Thesis with Company

Regensburg, Germany | 05/2025 - 12/2025

- Developed and optimized an active learning framework in Python and PyTorch to identify the most informative data instances for labeling and model training.
- Built scalable machine learning pipelines for dataset preprocessing, feature engineering and model training on large datasets.
- Applied statistical analysis and data exploration techniques on a time series dataset.
- Led to the reduction of training labeled data by 40%-60%, while maintaining model performance, thus lowering labeling costs and improving model efficiency.

Infineon Technologies AG - Data Science Working Student

Regensburg, Germany | 05/2023 - 03/2025

- Designed and built an anomaly detection backend architecture in Python, integrating multiple algorithms to enable reliable outlier detection in a dataset.
- Implemented feature importance analysis using tree based models to identify key features and support data-driven decision making in the production scenario.
- Collaborated with a team member and developed a trend detection system in Python to automatically monitor and detect abnormal changes in production processes, leading to earlier detection of changes and faster response times.
- Developed data pipelines for processing large datasets (tabular, sensor, time series data)
- Applied testing, debugging and version control (Git) to ensure system reliability.

Infineon Technologies AG - Data Science Intern

Regensburg, Germany | 05/2023 - 03/2025

- Engineered anomaly detection pipelines using unsupervised learning models to identify outliers in production data.
- Developed data visualizations using Matplotlib and Seaborn to monitor anomalies and report results.
- Built supervised machine learning predictive models using Python to support data-driven decision making.
- Prototyped dimensionality reduction techniques (PCA) and Autoencoders (using TensorFlow), integrating them into Python workflows for data exploration and model improvement.

TECHNICAL SKILLS

- **Programming:** Python, R, Java, Flutter, HTML, CSS
- **Software Development:** Backend Development, Data Pipelines, Data Processing, Object Oriented Programming, Documentaion
- **Machine Learning & AI:** Deep Learning, Neural Networks, Supervised & Unsupervised Learning, Anomaly Detection, Statistical Analysis, Data Cleaning & Preprocessing, Feature Engineering
- **Machine Learning Frameworks:** PyTorch, TensorFlow, scikit-learn, Keras, OpenCV, numpy, pandas
- **Databases:** Relational Databases, Oracle, SQL
- **Cloud, Development & Version Control:** Git, Bitbucket, MLflow, Microsoft Azure (Basic), VS Code, PyCharm, GitHub Copilot
- **Data Visualization & Tools:** Matplotlib, Seaborn, Tableau, Power Bi, Dashboard Development, Excel

SOFT SKILLS

- Communication
- Problem Solving Mindset
- Adaptability
- Team Spirit & Collaboration
- Responsibility
- Organization Skills

LANGUAGES

- English - Native
- Bahasa Melayu - Fluent
- German - Good Knowledge
- Spanish - Basic Knowledge