# **Lokesh Metta**

Jena, Germany | +49 15758085662 | Ikshmetta@gmail.com | linkedin.com/in/lokesh-metta | github.com/lokesh12190

#### **SUMMARY**

Skilled machine learning engineer with a proven track record of developing impactful solutions using advanced programming languages. Expert in enhancing project outcomes through innovative applications of machine learning, deep learning, and data analysis. Committed to delivering quality and efficiency, with a focus on performance enhancements.

#### **EDUCATION**

#### **Master of Science in Scientific Instrumentation**

Expected Aug 2024

Ernst Abbe Hochschule Jena, Germany

GPA: 1.9

Relevant Coursework: Data Science, Machine Learning, Artificial Intelligence, Embedded Programming

# **Bachelor of Technology in Mechanical Engineering**

Jul 2016 - Aug 2020

V.R Siddhartha Engineering College, Vijayawada, India

GPA: 1.9

Relevant Coursework: Mechatronics, Robotics, Applied Mathematics

## **EXPERIENCE**

# Continental GmbH, Hannover, Germany | Research Student

Aug 2023 - Jun 2024

- Developed and implemented a classification and identification system using Convolutional Neural Networks (CNNs) and Long Short-Term Memory (LSTM) networks to accurately detect defects in tires.
- Enhanced the detection rate of patched areas and surface anomalies, achieving a 98% improvement in the accuracy and efficiency of the tire retreading process.

Skills: Computer Vision, Neural Networks, Image Classification, Object Detection, Python, TensorFlow, PyTorch

## Continental GmbH, Hannover, Germany | Data Science and Data Analysis Intern

Mar 2023 - Jul 2023

- Designed and deployed advanced machine learning models that significantly reduced first tire waste by 60%.
- Applied data visualization techniques for stability analysis on tire curing processes, enhancing operational insights and process efficiency.

Skills: Machine Learning, Random Forest Regressor, Python, Pandas, NumPy, Scikit-learn, Power BI

# Talentica Software Pvt. Ltd., Pune, India | Machine Learning Engineer

Sep 2020 - Sep 2021

 Achieved a 30% reduction in food waste through enhanced demand forecasting and inventory precision, further refining inventory predictions by analyzing customer food preferences.

Skills: Clustering, Gradient Boosting, Python, Tableau

## APSSDC and Siemens, Vijayawada, India | Summer Intern on Industrial Robotics

May 2019 - Jun 2019

- Executed automated work cell simulation, validation, and offline programming using Rob Cad and ABB Robot Studio.
- Specialized in Material Handling, Arc, and Spot Welding processes with ABB technology in a virtual environment.
  Skills: C++, Robot Studio, Rob Cad

#### **PROJECTS**

#### Deep Autoencoder for Anomaly Detection | Ernst Abbe Hochschule, Jena

Nov 2023

• Engineered and deployed a deep learning autoencoder model to detect anomalies across various financial transactions, achieving 95% accuracy and reducing false positives by 40%.

# Autoregressive Moving Average Time Series Model | Ernst Abbe Hochschule, Jena

Dec 2023

• Developed Autoregressive Moving Average model to enhance forecast accuracy of IoT sensor data and improved model reliability through rigorous ADF, KPSS, and PACF tests, ensuring robust predictions for system optimizations.

## Object Tracking Using Deep Learning with OpenCV & Python | Ernst Abbe Hochschule, Jena

Mar 2024

• Implemented Single Object Tracking (SOT) and Multiple Object Tracking (MOT) solutions using OpenCV and Python, ensuring high-precision object identification and robust tracking in multi-object video streams.

# SKILLS

Programming Languages: C/C++, Python, SQL, R (Basics), Matlab

Machine Learning Frameworks: Scikit-learn, NumPy, Pandas, TensorFlow, Keras, PyTorch, OpenCV

Data Analysis and Visualization: Power BI, Tableau.

**Other:** Version Control System (Git), VBA, Power Apps, Unix, Flask, Kanban, MongoDB, PHP **Soft Skills:** Effective Communication, Innovative, Time Management, Analytical Thinking

# LANGUAGE

• English - Fluent • German - Good

## **CERTIFICATION**

Mathematics for Machine Learning Specialization: Coursera Introduction to Large Language Models, Generative AI: LinkedIn

Advanced SQL for Data Scientists: LinkedIn

Artificial Intelligence Foundations and Machine Learning: LinkedIn

# **ADDITIONAL**

Core Knowledge: Machine Learning, Deep Learning, Image Processing, Linear Algebra, Statistics, Probability

Awards: Won the Go Green Champion award for leading a tree-planting initiative in 2019