Skills

Programming Languages
Python, Java, C++, SQL

Tools & IDEs
GitHub, Visual Studio Code, IntelliJ IDEA, AutoCAD, UiPath, FlutterFlow, Docker

Libraries & Frameworks
TensorFlow, Keras, Pandas, NumPy, Matplotlib, OpenCV, PyTorch, Seaborn, Scikit-learn, NLTK

Languages
English (C1), German (A1), Gujarati (C2)

Strengths

Applied Problem Solving, Research-Driven Thinking, Autonomous Learning, Time & Task Prioritization, Team Collaboration

Volunteer Work

Machine Learning Mentor
11/2022 – 07/2023
ACM, Mumbai, India

- Mentored a team of 4 students in solving a stock market prediction problem.
- Guided model development, data analysis, and feature engineering.

Maitri Vignesh Shah
Saarbruecken
June 1, 2025

MAITRI VIGNESH SHAH

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Breslauer Straße 1b, 66121, Saarbruecken, Saarland, Germany.

Professional Experience

Research Assistant for QuadTransport Project **01/05/23 – 01/05/24**
SVKM's NMIMS Deemed-to-be-University, Mumbai, India

- Optimized Wasserstein Distance computation using the Hungarian Algorithm $O(iN^2 \log(N))$.
- Reduced execution time from 35 mins to 12 seconds via code profiling and algorithm tuning.
- Built and tested in Java using IntelliJ IDEA and Profiler.

Machine Learning Intern **05/05/2022 – 05/08/2022**
Corizo, Mumbai, India

- Developed K-Means and KNN models for music genre classification.
- Engineered data pipelines and tuned model hyperparameters.

Education

M.Sc in Data Science & Artificial Intelligence **04/2025 – Present**
Universitaet des Saarlandes, Germany

B.Tech in Artificial Intelligence **08/2020 – 08/2024**
SVKM's NMIMS Deemed-to-be-University, Mumbai, India
CGPA: 3.95 / 4.0

Projects

Trust and Tag Aware Recommendation System **06/2023 – 11/2023**
SVKM's NMIMS Deemed-to-be-University, Mumbai, India

- Developed a recommender using trust and tag data from the Last.fm dataset.
- Applied Sparse Auto-Encoders to encode user trust and tag data, improving model accuracy and reducing sparsity.

Intraday Trading Signals Classification **06/2022 – 11/2022**
SVKM's NMIMS Deemed-to-be-University, Mumbai, India

- Designed and trained an LSTM model using TensorFlow for decision-making, incorporating various technical indicators as additional features.
- Achieved an average Return On Investment of 20% through cross-validation of the model.

Biometric Identification System **12/2022 – 04/2023**
SVKM's NMIMS Deemed-to-be-University, Mumbai, India

- Built a neural network model using RGB + Thermal face data and voice inputs for subject identification.
- Extracted and represented features using Local Ternary Patterns for face data and MFCCs for voice signals.