

Ashish Jadhav

Aspiring Data Scientist | Germany

[Linkedin](#) | [Website](#) | [Github](#)

SKILLS

Languages and environment management : Python, JavaScript, MATLAB, HTML, CSS, pip, conda, venv, npm

Frameworks (DL, ML, CV, NLP): Tensorflow, Pytorch, Scikit-learn, openCV, Opensmile, Rasa.

Frameworks (Frontend): Vue, Node.js and Ionic.

Libraries (data, visualisation, web): Numpy, Pandas, Requests, Matplotlib, Seaborn, Jekyll, Flask.

OS, Shell scripting, version control: Linux, Bash, Zsh and Git.

Tools and Computing Environments: SLURM, SSH, HPC Systems.

Soft Skills: Teamwork, Problem-solving, Analytical thinking, Creativity, Resilience, Critical thinking, Communication, Consultative approach, Research orientation, Innovation.

EXPERIENCE

Working Student - Machine Learning Engineer

October 2024 - Present

[Compolytics GmbH](#) | Barleben, Germany

- Utilized features extracted during internship to train and compare three machine learning architectures: Multi-Layer Perceptron (MLP), Learning Vector Quantization (LVQ), and Radial Basis Function (RBF) networks.
- Trained and validated models using K-Fold cross-validation, ensuring robustness and reliability of results.
- Authored a draft research paper summarizing the work, submitted for presentation at the ESSAN conference.
- Developed the frontend of an app using Vue.js, JavaScript, and Ionic, designed for machine learning inference.
- Currently implementing cloud-based inference pipelines to integrate the developed model for scalable deployment.

Intern - Machine Learning Intern

April 2024- September 2024

[Compolytics GmbH](#) | Barleben, Germany

- Captured diffraction data using a smartphone camera, enabling cost-effective data collection for analysis.
- Preprocessed raw images using OpenCV, improving data quality and readiness for feature extraction.
- Executed feature extraction on a High-Performance Computing (HPC) system with Slurm workload manager, optimizing computational efficiency for large datasets.
- Analyzed feature correlations using a correlation matrix, selecting the most relevant features to enhance neural network training accuracy.

Lead Engineer

July 2019 - Sept. 2022

[Tata Power Company Ltd](#) | Mumbai, India

- Analyzed energy consumption data to predict usage patterns, contributing to optimized load scheduling and improved energy management.
- Diagnosed and resolved issues with high and low voltage switchgear, ensuring 95% power reliability in the Mumbai subdivision.

EDUCATION

Electrical Engineering and Information Technology

(Master's Degree)

Oct 2022 - Present

Otto-von-Guericke University | Magdeburg, Germany

Electrical Engineering (Bachelor's Degree)

July 2015 - May 2019

Sardar Patel College of Engineering | Mumbai, India

PERSONAL PROJECTS

Alzheimer's Disease classification using spontaneous speech

[View in GitHub](#)

- Created a decision tree using scikit-learn for the early detection and classification of Alzheimer's Disease (AD) using spontaneous speech with accuracy of 80 %.

Mystic Forest Escape Room Chatbot

[View in GitHub](#)

- Worked in a team of four and designed a chatbot to guide users to play a text based escape room game. It is showcased on TU Berlin website.

Image Classification using Neural Network

[View in GitHub](#)

- Created MLP Neural network architecture for accurate digit recognition and comparison.
- Trained and Optimised Convolutional Neural Network (CNN) with accuracy of 99.05%.

UNPUBLISHED RESEARCH WRITINGS

- Jadhav A. S. and Sinha Y. (2023). Pathological speech processing - a systematic review: datasets, acoustic features and applications. - Systematic review report as part of coursework NTPS [View Paper](#)
- Jadhav A. S. (2023) Machine Learning in IIoT communications . - Technical report as part of coursework Digital Communication System. [View Paper](#)

LANGUAGES

- English - C1
- German - A2