



Meghanathi Gaurangiri

Contact

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kaggle

Languages

- English – Fluent
- German – Basic Proficiency

Soft Skills

- Communication
- Creativity
- Adaptability
- Time management
- Curiosity

Summary

As a Master's student in mechatronics and cyber-physical systems, I have acquired valuable knowledge in machine learning and deep learning techniques through practical implementation in projects at Fraunhofer. Now seeking an internship or master's thesis to further explore and contribute my skills in machine learning and deep learning to an organization.

Technical Skills

- Programming languages: Python, C++, SQL.
- ML and Deep Learning libraries: TensorFlow, Keras, Scikit-learn, OpenCV.
- Data visualization tools: Matplotlib, Seaborn.
- Data analytics tools: Pandas, NumPy, Power BI.
- Web frameworks: Flask, FastAPI.
- Databases: MySQL and MongoDB.
- Cloud platforms: Azure, Heroku, AWS.
- MLOps tools: CI/CD pipeline, Git Action, Docker.

Work Experience

Research Student - Fraunhofer IKTS, Dresden, Germany: 01.09.2022 -Present.

- Experimental data collection on the Aerosol Jet Printer focused on predicting line width and optimizing production processes for time and cost savings.
- Developed a web application that streamlined the data cleaning process, ensuring consistent and reliable data quality with reduced manual effort.
- Improved the functionality of the web app by implementing automated data validation, transformation features, and a pipeline for efficient model training and prediction.

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Junior automation engineer – Immortal innovation, Jamnagar, India:
15.12.2018 – 30.09.2019

- Servicing and commissioning of protective electrical gear.
- Installation and maintenance of electrical panels.
- Programming of various PLCs (Delta, Fatek, and Siemens).

Electrical engineer – Essar project India Ltd., Jamnagar, India:
01.10.2018 – 30.11.2018

- Maintained 1600 kVA power transformer and H.T/L.T panel, improved power factor.
- Maintained 125KW blower, troubleshooted flow transmitter, sensors, and control panel.

Interests

- Volunteering
- Traveling
- Music
- Cooking



Education

Masters in Mechatronic and Cyber-Physical Systems – 03.2020 to present
Deggendorf Institute of Technology (Campus Cham), Cham, Germany

Bachelors in electrical engineering – 09.2013 to 08.2017
Gujarat Technological University, Gujarat, India

Certifications

- Tensorflow Developer Certificate (04.2023). [🔗](#)
- AI-900: Microsoft Azure AI Fundamentals(03.2023). [🔗](#)
- Deep Learning Specialization: Coursera(09.2022). [🔗](#)
- Machine Learning Specialization: Coursera (08.2022). [🔗](#)

Project Work

APS Failure Detection in Heavy Duty Vehicles using Machine Learning: [🔗](#)

- Developed a machine learning-based solution to detect and predict failures in heavy-duty vehicle air pressure systems.
- Implemented a modular pipeline consisting of data ingestion, validation, transformation, model training, evaluation, and pusher stages.
- Utilized Python and XGBoost for the machine learning model, employed Docker, MongoDB, and Airflow for data storage, containerization, and workflow management, and deployed the solution on AWS EC2, ECR, and Git Actions.
- Aimed to reduce unnecessary repair costs by minimizing false predictions and improving failure detection accuracy.

Alzheimer's Disease Detection Project: [🔗](#)

- Developed a Flask-based web app for Alzheimer's detection using MRI images.
- Implemented a deep learning model with TensorFlow for classification.
- Enabled user uploads for prediction of cognitive health status.
- Integrated a training feature to allow users to train the model on the web app.
- Used MLflow for training metrics and experimentation.
- Integrated DVC for data version control and reproducibility.
- Deployed the app using Docker on AWS EC2.
- Automated deployment with Git Actions.
- Combined ML, web dev, and infrastructure skills.