PAVAN KUMAR

PERSONAL DATA

Address:
Schröfelhofstraße 6/ 0506
81375 Munich, Germany

E-Mail:
pavanln049@gmail.com

Telephone:
+49 17635687027

Personal website:
https://pavan-aiml.github.io/pk/

GitHub:
https://github.com/Pavan-AIML

SKILLS

Languages:
Python, MATLAB

Frameworks & Libraries:
PyTorch, TensorFlow, Hugging Face, LangChain, OpenCV, Pandas, NumPy, Matplotlib, Seaborn, NLTK, spaCy, Streamlit, FastAPI, Scikit-learn

Technologies & Tools:
Deep-Learning, NLP, Computer Vision, PowerBI, Excel, Docker, Git, Kubernetes, Azure Cloud, SQL, Pinecone, Machine Learning

LANGUAGE SKILLS

German (A1)
English (Fluent)
Hindi (Mother tongue)

WORK EXPERIENCE

01/02/2025 – 31/03/2025, Munich, Germany

Internship as an AI-Engineer, databAIse.

- Developed a web scraping agent to extract the dynamic website content.
- Optimized mathematical models using PuLP and the Gurobi solver.
- Built custom RAG-based AI applications.

01/06/2024 – 30/09/2024, Munich, Germany

Working student as a Data Analyst and Front-End Developer, BMW.

- Built Python ETL pipelines (Pandas, PySpark, Airflow) and a Streamlit dashboard.

15/10/2023 – 14/04/2024, Oberkochen, Germany

Internship in Deep Learning, Zeiss.

- Data analysis and visualization in Python
- Built a multi-degree polynomial regression model from scratch for data interpolation
- Trained different AI model architectures in PyTorch to interpolate 3d point cloud data
- Used Optuna to finetune the process and network architecture

19/06/2023 – 18/08/2023, Munich, Germany

Internship in Machine Learning and Deep Learning, Max Planck.

- Built a data-analysis pipeline for spectral image dataset
- Trained a CNN to correctly identify the wrong predictions by the pipeline

20/08/2022 – 17/02/2023, Munich, Germany

Working student as Data Analyst, Infineon Technologies.

- Analyzed internal training data using Python (pandas) and Excel
- Built interactive PowerBI dashboards to enhance data monitoring and reporting

PROJECTS

- Building and deploying a Chatbot to assist HR team for the recruitment process using OpenAI model [Link]
- Object detection by sliding window and non-maximum suppression [Link]
- Dexterous Antagonistic Robotic Finger: Finding optimal path using Optimal Control [Link]
- Real and fake news classifier using NLP techniques [Link]

EDUCATION AND TRAINING

01/10/2021 – Present, Munich, Germany

- M.Sc. Mathematics in Science and Engineering, Technical University of Munich

14/02/2013 – 01/09/2017, Vellore, India

- B.Tech. Civil Engineering, Vellore Institute of Technology

- **Related University courses**:

  Foundations of Data Analysis, Optimization, Computer Vision (Multiple view geometry), Advanced Computer Vision, Deep Learning, Machine Learning

HOBBIES AND INTERESTS

- Calisthenics, cooking.
- Participation in TUM AI Makethon2024 [Link]