

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

Project Management:

Scrum, Kanban

LANGUAGE SKILLS

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

PARTICIPATION

TUM AI Makethon2024 [Link]

HOBBIES AND INTERESTS

Calisthenics, cooking.

WORK EXPERIENCE

01/06/2025 - Present, Munich, Germany

Working student as an AI Engineer, MerMec Deutschland

• Designing and orchestrating autonomous AI agents and also leveraging RAG to execute complex tasks for the execution team.

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, LLM fine-tuning using QLoRA

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

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

- Built Python ETL pipelines
- Developed interactive dashboard with Excel and CSV file import, filtering and shorting features.

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