Mohd Aamir

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EDUCATION

EURECOM Sophia Antipolis, France

Master of Science in Data Science

Sep. 2021 - Sep 2023

SRM University

Chennai, India

Bachelor of Technology in Electronics and Communication

Sep. 2016 - Sep 2020

Experience

Data Science Engineer

Feb 2024 - Present

EURECOM — Huawei Project Netception — EU Project Adroit6G

Sophia Antipolis, France

- Engineered state-of-the-art **anomaly detection** pipeline for multivariate time series data by adapting **deep learning models** enabling direct modeling of missing values and improving **anomaly detection F1-score** by 12% over Huawei's baseline models.
- Benchmarked 12+ architectures (e.g. LSTM/TCN/Transformer) on synthetic and confidential Huawei datasets; implemented algorithms to inject controlled missing timestamps for testing.
- Integrated 3 pre-trained diffusion models into MLflow, enabling real-time inference of missing 3D holographic views during teaching sessions for the EU Adroit6G project.
- Validated outputs through various **KPIs** such as SSIM/PSNR, sustaining over **95**% SSIM on generated views.
- Collaborated with **20+ researchers** and industry partners across Europe, representing EURECOM in bi-weekly consortium meetings and **delivering technical papers** and work packages.

Computer Vision Intern

Mar. 2023 - Sep 2023

HUAWEI

Mougins, France

- Generated a dataset of 50,000 noisy raw images by reversing Huawei's proprietary **image processing** pipeline, enabling **supervised training** for raw image denoising.
- Implemented a CNN-based raw image denoising model in PyTorch, pruned CNN to cut inference time by 21% with PSNR drop less than 3 dB.
- Optimized training pipelines/hyperparameters, reducing training time by 15% on Huawei's GPU clusters.

Projects

Enterprise AI: LangChain Tool-Calling & RAG Agent |

July. 2025 – Sep. 2025

- Built an end-to-end enterprise assistant using LangChain, tool calling, and RAG over company knowledge to draft emails, schedule meetings via Gmail, and answer internal queries.
- Orchestrated **LangChain** agents and tools using structured toolcalling, RAG chains, and **vector** retrieval via **Pinecone** for context awareness, backed by **SQLite** for chat memory.
- Developed backend with **FastAPI**, containerized using **Docker**, deployed on **Kubernetes** and **AWS**, and managed via **CI/CD** for scalability.

Detecting Prevent/Enable event relationship types in text

Oct. 2022 – Feb. 2023

- Created 1.4M-sentence dataset from 140 k news articles using a Python-based extraction and preprocessing.
- Applied **S-BERT** embeddings with ensemble **classifiers**, achieving 87% accuracy outperforming single-model baselines by 6%.

Detecting Context Misinformation in Text and Images

Mar. 2022 – June 2022

- Extracted features from text (S-BERT) and images (ResNet-50) for multi-modal misinformation classification.
- Trained MLP and SVM classifiers in TensorFlow, improving accuracy by 9% over previous baselines.

Snake Species Identification Using Images

Oct. 2021 - Feb. 2022

- Developed CNNs alongside SVM, MLP, and KNN classifiers for venomous snake identification.
- Achieved high-accuracy classification enabling potential field deployment for wildlife safety applications.

TECHNICAL SKILLS

Programming Languages: Python, C++, SQL, MATLAB, JavaScript, HTML5, CSS

Data Science & Machine Learning: PyTorch, TensorFlow, Keras, scikit-learn, CUDA, LLMs, NLP, Diffusion Models, Pandas, NumPy, SciPy, Matplotlib, Seaborn, OpenCV, OpenAI API, HuggingFace Hub API

Tools & Frameworks: LangChain, MLFlow, Docker, Git, Linux, AWS, Kubernetes, VS Code, Visual Studio, SQL,

Pinecone, React, TailwindCSS, FastAPI, REST APIs