Adele Pia Romano

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Experience

Machine Learning Engineer   *Tutzing, Germany*
Knowlix GmbH   *Febr 2023 – Ongoing*

- Designed and deployed end-to-end ML pipelines for real-world applications.
- Fine-tuned Visual Language Models and Large Language Models (LLMs).
- Deployed deep learning models on edge devices, optimizing latency and memory usage
- Implemented serverless inference endpoints for LLMs
- Conducted prompt engineering and data analysis for model fine-tuning
- Monitored and troubleshot ML systems using alert systems and logging tools

Research Fellow   *Rende, Italy*
University of Calabria   *May 2022 – Dec 2022*

- Implemented and trained Generative Adversarial Networks (GANs) for spectrogram generation
- Integrated Vision Transformer models in GAN architectures for image generation

Education

MS in Artificial Intelligence and Machine Learning   *Sept 2019 – Apr 2022*
University of Calabria

- Score: 110/110 cum Laude
- Thesis: "Audio Super-resolution via Vision Transformer"

BS in Computer Engineer   *Sept 2016 – Sept 2019*
University of Calabria

- Score: 106/110
- Thesis: "A classification algorithm for gene expression data based on individual networks"

Publications

Audio super-resolution via vision transformer   *Dec 2023*

Simona Nisticò, Luigi Palopoli, ***Adele Pia Romano*** - 10.1007/s10844-023-00833-w 🔗

Skills

Machine Learning & AI:

- **Model Architectures:** Transformers, CNNs, RNNs, GANs.

- **ML Frameworks:** Pytorch, TensorFlow, Keras.

- **Libraries & Tools:** TorchVision, NLTK, CoreML, ONNX, LangChain, FastAPI, vLLM, Numpy, Scikit-Learn, pandas, SciPy, PIL, OpenCV, librosa, Matplotlib, Seaborn, Weights & Biases.

- **CI/CD Pipelines:** Automating ML model training, testing, and deployment.

- **Serverless & Edge AI:** Deploying models on edge devices with optimized resource usage.

- **Cloud Services:** AWS, Microsoft Azure.

Software Development:

- **Programming Languages:** Python, Java, Swift, C, Javascript, Assembly.

- **Databases:** SQL: MySQL, PostgreSQL. No SQL: DynamoDB, MongoDB.

- **Version Control and Collaboration Tools:** Git, Github, Bitbucket, JIRA, Confluence.

- **Operating Systems:** Linux, MacOS, Windows.