



EMAILIC

AI/ML ENGINEER, GENERATIVE AI

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[Linkedin](#), [Medium](#), [Github](#)

Rijeka, Croatia

PROFILE

Commercially minded AI/ML Engineer with +5 years of experience in developing and deploying AI native systems. Experienced in building and maintaining LLM based systems in production, ensuring scalability, reliability, and continuous evaluation. Contributed to a [project](#) showcased at Google I/O 2023 in San Francisco. Co-authored a [paper](#) presented at the SwissText Conference 2022 in Lugano, Switzerland. Author of a [blog](#) focused LLMs.

SKILLS

- RAG (Vector DB: Pinecone)
- AI Agents (Langchain)
- MLOps: IaC and CICD with Terraform and Github Actions
- VertexAI and Google Cloud Platform (GCP)
- Docker
- FastAPI
- Python and AI APIS (OpenAI, Huggingface, Tensorflow, Langchain, Pytorch, Pandas, PIL, OpenCV...)
- Linux, Bash, Git
- Image Generation: Stable Diffusion, Dreambooth, Dall-E, Midjourney
- Monitoring AI systems: Langfuse & Langsmith
- Data Warehousing and ETL in SSMS
- Transact-SQL, OLAP Cube, MDX
- Hadoop/Apache Spark (MapReduce)

PUBLICATIONS

[A review of Text Classification Models: from Bayesian to Transformers; Ilic, Garcia Martinez, Souto Pastor; SwissText Conference, Lugano, Switzerland \(CEUR-WS, September 2022\).](#)

WORK EXPERIENCE

AI Consultant

[Notch](#), Remote, Freelance

April 2025 - Present

- Led AI/ML Strategy for next generation bioprocess simulation platform for a pharmaceutical company
- Defined core and emerging ML use cases including sensitivity analysis, automated retraining strategies, model lifecycle management
- Collaborated with cross-functional teams (data scientists, product owners, domain experts) to align technical ML solutions with bioprocessing domain requirements and regulatory expectations
- Proposed AI-powered assistant features to extend beyond documentation support, including contextual guidance for simulation, experiment design, and performance troubleshooting

AI/ML Engineer, Generative AI

[CHAPTR](#), A Holtzbrinck Business, Remote

Nov 2022 - Oct 2024

- Developed and scaled an AI Assistant to 700+ monthly active users
- Led the implementation of an Evaluation System for RAG pipeline
- RAG development: Large-document ingestion, querying with Pinecone, OpenAI embeddings, and models
- LLM APIs for narrative generation and chatbot building (OpenAI, Gemini, Gemma, Anthropic Claude)
- Led Topic Modeling of chats
- Prototyped Agent based evaluation and brainstorming systems (LangChain)
- MLOps/LLMOps: IaC with Terraform, CICD with Github Actions, Docker
- Images: training, fine-tuning and prompting diffusion models (Stable Diffusion, DreamBooth, DALL·E, Midjourney)
- Tech stack: Python, LangChain, Agents, Langfuse, GCP (Firebase, BigQuery, Cloud Function, Google Cloud Storage, Cloud Run, Compute Engine and Virtual Machines, IAM Security, VertexAI)

✨ If you are still reading this: Check out my [Linkedin](#) and [Medium](#) articles and the [newsletter](#) I'm coauthoring for recent paper reviews and advice on most common issues in AI products ✨

EMALIC

AI/ML ENGINEER, GENERATIVE AI

EDUCATION

Master's Degree in Data Science University of Pisa, Italy

2019-2022

Award: Merit-Based Scholarship for Deserving International Students by the University of Pisa

Master's Degree in Data Science [Exchange Semester] Polytechnic University of Madrid, Spain

2021-2021

Department of Computer Science

Bachelor's Degree in Business and Economics University of Bologna, Italy

2016-2019

Award: 2nd Place at Procter&Gamble Marketing Research Project on Head&Shoulders Product Line in Digital Environment

LANGUAGES

English, Spanish, Croatian,
Italian

PERSONAL PROJECTS

Sensor Data Analysis:

- Advanced Classification (SVM, Convolutional and Recurrent NN, Deep NN,
- Ensemble Classifiers...) & Clustering (K-Means, DB Scan, Transactional C.)
- Time Series Analysis & Forecasting (Dynamic Time Warping, Motifs, Shapelets, TS Classification & Clustering)
- Dimensionality Reduction with PCA, SVD, UFS, RFE...

NLP Scientist

Pangeanic S.L., Valencia, Spain

Jul 2021 - Mar 2022

- Fine-tuning multiclass and binary LLM (BERT & GPT-2) for text classification on two datasets (99% Accuracy and 98% F1)
- Co-authored a research paper presented at SwissText conference
- Tech stack: Python, Huggingface, Pytorch, ScikitLearn, Jupyter Notebook

Research Scientist (Computer Vision)

University of Las Palmas de Gran Canaria, Spain

Jan 2022- Oct 2022

- YOLOv5 for object detection: 96.41% F1 on an object detection task
- Semantic segmentation (UNET) and VGG16 classifier
- Achieved 3.6x better results (P, R, F1) than the state of the art model
- Tech stack: Python, Tensorflow, Pytorch, ScikitLearn, Keras

Computer Vision Engineer

Secret Source S.L., Canary Islands, Spain

Sep 2021 - Dec 2021

- Built ML backend of a classification pipeline (ResNet34, 50 & 101) for 40+ construction machines for a client, later turned into an android app
- Data preprocessing and cleaning
- Tech stack: Python, Tensorflow, Pytorch, ScikitLearn, Keras, Pandas

MODELS

- Traditional Models: Naive Bayes, Support Vector Machines, Logistic Regression, KNN, Decision Trees
 - Ensembles: Random Forest, Bagging, Boosting
 - Neural Networks: Convolutional, Recurrent, Residual, LSTM, Graph, Deep
 - Advanced models: GPT-2 and BERT (finetuning), GPT-3, GPT-4, Gemini, Gemma, Claude (API), YOLOV5, VGG16, UNET,
 - Clustering: K-Means, DB Scan, Transactional Clustering
 - Time Series Forecasting & Analysis: ARIMA, SARIMAX, Dynamic Time Warping, Motifs, Shapelets
 - Sequential Pattern Mining: GSP Algorithm
 - Outlier & Anomaly Detection: ABOD, LOF, KNN, COF, INFLO, Grid-Based
 - Dimensionality Reduction: PCA, SVD, UFS, RFE
 - Analysis of Sensor Data: Predicting room occupancy based on light, CO2, humidity, temperature, and time
 - Advanced Classification: SVM, Convolutional and Recurrent Neural Networks, Deep Neural Networks, Ensemble Classifiers
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