

Francesco Bosso

Rome, Italy

francesco_bosso@outlook.com • +39 3469601901 • [website](#)

Experience

AI Research Engineer

Sep 2023 - Present

Leonardo - Aerospace, Defense and Security, Rome, Italy

Member of the Artificial Intelligence Lab, focusing on applying AI methods in the Aerospace, Defense, and Security sectors. My contributions include developing ML solutions aimed at shaping intelligent systems able to increase the resilience of tools against physical and non-physical threats. My research line involves audio, signal, and time series analysis for the Future Electronics and Sensing division.

AI Expert - Unit JRC E.2

Apr 2023 - Mar 2024

European Commission, Ispra, Italy

Member of Unit JRC E.2, Technologies for Space, Security, and Connectivity. Application of DL methods in the context of the European Network for Critical Entities Resilience (ENCER) project focused on deploying AI frameworks to advance the Threat Intelligence domain and fighting Hybrid Threats. Specifically, the project consisted of the application of Natural Language Processing (NLP) methods, including Large Language Models (LLMs) and Named Entity Recognition (NER), to develop text processing pipelines. These pipelines were designed to organize unstructured text into Knowledge Graphs, enhancing the ability to detect potential Hybrid Threats. ([Publication 1](#))([Publication 2](#))

AI Data Research Intern

Sep 2022 - Apr 2023

UNESCO IHE Delft, Delft, Netherlands

Member of the CLimate INTelligence (CLINT) project. The project's focus is on developing an AI framework for processing climatic big data to detect and attribute extreme events. My role involved applying statistical methods for feature selection and using Machine Learning algorithms (e.g., ELM, MLP, and CNN) to predict extreme drought events. This research is pending publication and was presented at the European Geosciences Union (EGU) General Assembly 2023. ([Abstract](#))

Geospatial Data Engineer

Mar 2022 - Sep 2022

Italian Ministry for the Environment, Rome, Italy

Member of the technical hub of the Minister. Development of the Integrated Geospatial Information Framework (IGIF) in alignment with the United Nations Committee of Experts on Global Geospatial Information Management (UN-GGIM) guidelines. My responsibilities included conducting Geospatial Information Systems analysis, managing governmental-level relationships, and conveying the IGIF concept to governmental agencies.

Education

Geoinformatics Engineering - M.Sc.

2020 - 2022

Politecnico di Milano, Milan, Italy

Grade: 110 cum Laude

Skills

AI-Related Skills: Machine/Deep Learning, NLP, Uncertainty in AI, Soft Computing

Space data-Related Skills: Optical imaging, Radar imaging, GNSS

IT-Related Skills: Linux, Python, GIT, SQL, SLURM, JavaScript, TensorFlow, PyTorch

AI Specializations: AI4Climate, AI4Security, AI4Defence, AI4Space

Languages

Italian: Mother tongue English: C1 Spanish: B1