# Francesco Bosso

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# Experience

### AI Research Engineer

Sep 2023 - Present

Leonardo - Aerospace, Defense and Security, Rome, Italy

Engaged at Leonardo's AI Lab, focusing on applying AI methods in the Aerospace and Defense sector. My contributions include developing various models for the Cognitive Radar domain. My research line involves audio, signal, and time series analysis for the Feature Electronics and Sensing division

Researcher - Unit JRC E.2 Expert - Unit JRC E.2 Apr 2023 - Sep 2023 Dec 2023 - Present

European Commission, Ispra, Italy

Support to 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 to address Hybrid Threats. My contributions involved utilizing Natural Language Processing (NLP) techniques, such as Large Language Models (LLMs) and Named Entity Recognition (NER), to create text processing pipelines for location intelligence to detect potential hybrid threats.

#### GeoAl Data Research Intern

Sep 2022 - Apr 2023

UNESCO IHE Delft, Delft, Netherlands

Contibution to 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, NN, 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

Development of the Italian 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. Additionally, a proof of concept for IGIF's development approach was presented to the head of the technical secretary of the Minister, Dr. Tomellini Renzo.

## Education

### Geoinformatics Engineering - M.Sc. [ENG]

2020 - 2022

Politecnico di Milano, Milan, Italy

Grade: 110 cum Laude

## Skills

AI-Related Skills: Artificial Intelligence, Machine 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