

Ambroise RENAUD

Data Scientist

+33 6 46 42 12 11 @ ambroise.renaud@gmail.com [ambroise-renaud.fr](https://github.com/ambroise-renaud)
Mandelieu-La-Napoule (06210), France Mobility : PACA area / Full-remote
 Born in 1997 in Nice, France



Specialized in computer science and data science, I enjoy working on solving complex industrial challenges in sensitive contexts. With strong skills in data analysis and modeling, acquired through various internships, lab work, contracts, and my PhD, I am seeking a position as a Data Scientist/Engineer or as a Modeling and Simulation Engineer in the industry/telecom/defense sectors starting in December 2024.

EDUCATION

- 2021 - 2025** Mines Paris - PSL, Sophia-Antipolis, France
PhD Candidate - AIS Propagation Modeling using Machine Learning
- 2019 - 2020** EPFL, Lausanne, Switzerland
Academic Exchange Year - Data Science
- 2017 - 2021** ENSISA, Mulhouse, France
Engineering Degree - Specialization in Computer Science and Networks

WORK EXPERIENCE

- December 2024** | **Mines Paris - PSL (CRC)**
PHD CANDIDATE (FIXED-TERM CONTRACT, 3 YEARS), Sophia-Antipolis, France
- December 2021** | Modeling and characterization of ship radio-frequency emissions using AI and verifying consistency with transmitted and received data.
 - > State-of-the-art research and technology watch : VHF propagation, propagation phenomena, VHF wave propagation modeling using AI.
 - > Data collection and storage : design, sizing, and deployment of a data acquisition, transformation, storage, and monitoring pipeline for ship data.
 - > AI-based modeling : modeling of the environment and propagation of VHF emissions.
 - > Implementation : development, implementation, and evaluation of the proposed approach.
- September 2018** | **DATA ENGINEERING INTERN (INTERSHIP, 2 MONTHS)**, Sophia-Antipolis, France
- June 2018** | Deployment of a data acquisition station and a maritime data (AIS) storage system.
- November 2021** | **Naval Group (CEMIS)**
DATA SCIENTIST (FIXED-TERM CONTRACT, 9 MONTHS), Ollioules, France
- March 2021** | Set up a process for ingesting, storing, and transforming data, and utilized semantic web technologies and ontologies for maritime situational awareness in strategic and tactical operations for the H2020 EFFECTOR project.
- January 2021** | **DATA SCIENTIST INTERN (INTERSHIP, 6 MONTHS)**, Ollioules, France
- July 2020** | Optimization of artificial intelligence algorithms for the integrity of defense naval systems.
- September 2019** | **NATO Science and Technology Organization (CMRE)**
RESEARCH INTERN (INTERSHIP, 3 MONTHS), La Spezia, Italy
- June 2019** | Machine learning for detecting suspicious behavior of ships at sea.

TECHNICAL SKILLS

Data Science	Machine Learning (Scikit-learn), Deep Learning (PyTorch, PyTorch Geometric, Keras), Array Manipulation (Numpy, Pandas, Xarray), Data Visualization (Matplotlib, Seaborn, QGIS)
Data Engineering	Relational and Time-Series Database Management (PostgreSQL, TimescaleDB), Distributed Data Processing (Apache Kafka, Apache NiFi, Apache Spark/PySpark), Data Search and Visualization (ELK Stack), RDF Query Systems (SPARQL, Ontop)
Software Engineering	Programming (Python, C++...), Version Control (Git), Unit/Integration Testing (Unittest, JUnit), Continuous Integration (Jenkins), Project Management (Jira)
Radio Wave Propagation	Implementation of Propagation Models (ITM-ITS, ITU-R, PE), Graph-based Propagation Modeling, Data-driven Modeling, Tropospheric Propagation Modeling

LANGUAGES

French Native language
English TOEIC 960/990 - C1 Level

GENERAL SKILLS

Teamwork Adaptability
Technology Watch Project Management