

Ambroise RENAUD

Engineer specialised in Data Science and AI

Available Now



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Objective - To obtain a full-time position as a Data Scientist, Data Engineer, or a data-related role, applying my skills in data analysis, machine learning, and software engineering to solve real-world challenges.

EDUCATION

Mines Paris - PSL , Ph.D. in Data Science - Paris, France Ph.D. thesis of the PSL University prepared at Mines Paris CRC laboratory.	2021 - expected 2025
EPFL , Academic Exchange in Data Science - Lausanne, Switzerland Autumn and spring semesters, focusing on machine learning, deep learning, mathematics, optimisation and applied data analysis courses. Two data science 6-months hands-on projects (at CHILI and LIONS labs).	2019 - 2020
ENSISA , M.Sc. in Computer Science (« Diplôme d'ingénieur ») - Mulhouse, France Software engineering, computer science. Data science specialisation modules. Training includes management and project management.	2017-2021

EXPERIENCE

PhD Candidate, Mines Paris - PSL - Sophia-Antipolis, France Modelling and classification of ship radio-frequency emissions using AI. <ul style="list-style-type: none">Conducted research on VHF propagation and AI-based radio-wave modelling.Designed and deployed a data acquisition, transformation, and storage pipeline in the context of big data, handling large volumes of real-time streaming data.Modelled VHF emission propagation using AI techniques.Developed, implemented, and evaluated the proposed AI-based approach.	Dec 2021 - Dec 2024
Data Scientist, Naval Group - Ollioules, France H2020 EFFECTOR project for maritime situational awareness at strategic and tactical operations. <ul style="list-style-type: none">Implemented a data ingestion, storage, and transformation pipeline.Applied semantic web technologies and ontologies for maritime awareness.	Mar 2021 - Nov 2021
Data Scientist (Internship), Naval Group - Ollioules, France Optimization of AI algorithms for the integrity of naval defence systems. <ul style="list-style-type: none">Reduced model selection cost by 10x using automated machine learning.Developed optimization methods with genetic algorithms and random search.	July 2020 - Jan 2021
Data Scientist (Internship), NATO (CMRE) - La Spezia, Italy Machine learning for detecting suspicious behaviour of ships at sea. <ul style="list-style-type: none">Designed a machine learning pipeline to classify ships behaviours at sea.Highlighted key features and showcased results within the operational context.	June 2019 - Sept 2019
Data Engineer (Internship), Mines Paris - Sophia-Antipolis, France Deployment of a data acquisition station and a maritime data storage system. <ul style="list-style-type: none">Built a data ingestion pipeline to parse and store real-time streamed data.Optimized query speed and storage size.	June 2018 - Sept 2018

SKILLS AND ADDITIONAL INFORMATION

Languages:	English (fluent, TOEIC: 960/990 - C1 Level), French (native)
Programming:	Python, C/C++, Java
Data Science/ML:	PyTorch, Keras, Scikit-learn, Pandas, Numpy, XArray, Seaborn, QGIS, Grafana
Data Engineering:	PostgreSQL, TimescaleDB, Apache Kafka/NiFi/Spark, PySpark, ELK Stack, Private clouds for distributed computing, Public clouds (GCP/AWS)
Software Engineering:	Git, Unittest, Jenkins, Jira, Docker, Coding standards and best practices
Driving licence:	B (cars)
Activities and hobbies:	Ultra trail running, cycling, aviation photography (spotting)