

# 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

<b>Mines Paris – PSL</b> , Ph.D. in Data Science – Paris, France Ph.D. thesis of the PSL University prepared at Mines Paris CRC laboratory.	2021 – expected 2025
<b>EPFL</b> , 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 CHILL and LIONS labs).	2019 – 2020
<b>ENSISA</b> , 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

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

## SKILLS AND ADDITIONAL INFORMATION

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