Ambroise **Renaud Data Scientist**

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▼ Toulon (83200), France

i Born: 04/08/1997 at Nice, France



Specialized in Computer Science, I have a great interest in research, especially artificial intelligence applied to time series data. I love working on real world project involving state of the art technologies and using my knowledge to solve data analytic problems. I am actively looking for data scientist position in the manufacturing industry and R&D to solve business challenges.



EXPERIENCE

Naval Group January 2021

DATA SCIENTIST INTERN, France

July 2020

Internship at Naval Group Ollioules CEMIS (centre of excellence for information and signature management): Optimization of Artificial Intelligence Algorithms for systems integrity, applied to Naval Defense.

- > Linear Algebra
- > Probabilities
- > Machine Learning
- > Evolution strategy (ES), genetic algorithms (GA) and differential evolution (DE)

Python Pytorch Elasticsearch

September 2019

NATO

RESEARCH INTERN, Italy

June 2019

Internship at The North Atlantic Treaty Organization (NATO) STO-CMRE - Centre for Maritime Research and Experimentation in Data Knowledge and Operational Effectiveness team:

- > Machine learning classifiers applied to Automatic Identification System (AIS) data. (Random Forest, Decision Tree, Perceptron, KNN, Logistic Regression, SVM)
- > Feature selection
- > Hyperparameter optimization
- > Data analysis
- > Data Mining

Machine Learning Data Science Data Mining Python FTFX

September 2018

MINES ParisTech

DATA ENGINEERING INTERN, France

June 2018

Internship at the Risk and crisis research centre (CRC):

- > Data collection (deployment of an Automatic Identification System (AIS) station, Web scraping)
- > Data analysis
- > Data warehousing (PostgreSQL)
- > Java development

Java NodeJS PHP



EDUCATION

2019 - 2020 EPFL (École polytechnique fédérale de Lausanne)

Exchange Year | Machine Learning, Data Science, Learning Analytics, Mathematics of Data, Optimization for machine learning, Systems for data science, Deep learning, Advanced algorithms. Overall score: 5.25/6

2017 - 2020 Ecole Nationale Supérieure d'Ingénieurs Sud Alsace ENSISA

Engineer's degree in Computer Science & Networks

2015 - 2017 Institut Stanislas Cannes

CPGE PCSI-PSI, Physics, Mathematics, Automation. (Two-year highly selective classes to prepare for the competitive exams to the Grandes Écoles.)

2012 - 2015 Lycée Mont Saint Jean

Baccalauréat S, Mathematics, Life Sciences





French Native

English TOEIC 960/990

- > Independence
- > Decision making
- > Time management



Python Hands-on experience: internships, labs and semester projects focusing on implementing Ma-

chine Learning and Deep Learning models using Pytorch, sklearn, NumPy, Pandas or PySpark

for cluster-computing.

Mathematics Convex formulation for data analytics problems, optimization and statistical analysis.

Software engineering Theoretical courses as part of Engineer's Degree in Computer Science and Networks. Fami-

liarity with modern software engineering best practices (version control, unit testing, design

patterns and code writing convention).

Others Java, C++, SQL



SELE-SUPERVISED LEARNING FOR MRI SAMPLING

FEB 2020 - JUL 2020

Master semester project at EPFL Laboratory for Information and Inference Systems – LIONS.

Create a clean PyTorch re-implementation of a cutting-edge reinforcement learning based sampling algorithm. Deliverable were a well documented codebase including tests as well as a clear and legible report.

Python Pytorch Reinforcement Learning

A DEEP LEARNING APPROACH TO PREDICT CHILDREN INDUCTIVE REASONING STRATEGIES

SEP 2019 - FEB 2020

Master semester project at EPFL Computer-Human Interaction for Learning & Instruction laboratory - CHILI

This project focused on predicting children's next answers given their previous ones in a quiz environment. This projects covered models and methods to prepare temporal data and implement recurrent neural network for training and inference.

Python Keras Pytorch

DETERMINE HORMONE SIGNALLING ACTIVATION IN HUMAN BREAST CANCER SAMPLES

OCT 2019 - DEC 2019

ttps://github.com/ambroisernd/epfl-breast-cancer-ml-project

Machine Learning project at EPFL Swiss Institute for Experimental Cancer Research - Brisken laboratory. The goal was to use data collected by the laboratory to cluster patients according to their cells receptivity to hormones given their gene expression. **Best Machine Learning project award**.

Python Sklearn NumPy Pandas

EXPLORING FRENCH NATIONAL TRAFIC INJURIES DATA

OCT 2019 - JAN 2020

https://epfl-ada-project.github.io/

Applied Data Analysis project at EPFL. The goal was to explore a dataset provided by the French road safety observatory (ONISR), composed of more than 474,000 accidents from 2005 to 2018. Deliverable were: Python code & notebooks, a website, a poster.

Python Pandas NumPy Scipy.stats Seaborn

LEARNING TO DISCOVER: THE HIGGS BOSON MACHINE LEARNING CHALLENGE

OCT 2019 - Nov 2019

Project 1 of Machine Learning course at EPFL

Solve the Higgs Boson Machine Learning Challenge without using any deep learning or machine learning library.

Python NumPy

GENERATING MUSIC WITH ARTIFICIAL INTELLIGENCE (NEURAL APPROACH)

APR 2019 - JUN 2019

https://github.com/ambroisernd/projet2AMusic

Semester project at ENSISA. Given a patern of n notes, a neural network automatically generate the end of the song.

Python Keras

66 REFERENCES

Dr. Vincent Martin

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Dr. Aldo Napoli

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