



# Data scientist & mechatronics engineer specialized in Machine Learning for the industry

*I aim to contribute to bridging the divide between the industry and AI. My strongest assets include a pragmatic approach developed through my experience as mechatronics engineer, an expertise in data honed as a researcher and communication skills cultivated by a passion for graphic design.*

**Fanny Rebiffé**

## Media

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[fanny-rebiffe.github.io](https://fanny-rebiffe.github.io)

[LinkedIn](#)

[Tableau Public](#)

## Diploma

Master degree in Data Science

Engineering degree in Mechatronics

## Languages

French – Mother tongue

English – Fluent

Dutch – Beginner

## Machine Learning

Python, R, Matlab, SQL, Linux,  
LaTeX, NumPy, Pandas, TensorFlow,  
Scikit-learn, Stable-Baselines, Gym,  
Object Oriented Programming

## Mechatronics

PLC, Simulink, Robotics, Electricity,  
FEM, Mechanical design

## Communication

Infographics, hands-on workshops,  
Public presentation, Popular science,  
Videos, Interactive dashboard



## Work experiences

- 2023 1.5 years MARIN, Maritime research Data scientist
- Trained a Reinforcement Learning agent for autonomous sailing (Linux, Python)
  - Research on sim-to-real, evolutionary strategy, curriculum learning
  - Implemented Supervised Learning models (Python) for hazard forecasting
  - Designed a workshop to offer a hands-on experience to uninitiated publics
- 2017 3 years Jtekt, automotive supplier R&D engineer
- Cooperated with international stakeholders to design a consensual product
  - Developed a physics-informed data-driven model (Matlab) to predict system performances based on fuzzy data (measurements, experiments, FEM)



## Internships

- 2022 6 months Framatome, nuclear fuel design Data science trainee
- Designed interpretable Reinforcement Learning for product design optimization
  - Presented Machine Learning concept and project to uninitiated colleagues
- 2021 4 months Logicoss, medical software Data science trainee
- Developed data pipelines : cleaning, aggregation, anonymization, architecture
  - Implemented Unsupervised Learning models (R) to describe accident causes
- 2021 2 months Walterre, heating management Data science project
- Clustering and anomaly detection of heating systems
- 2016 6 months Tiama, robots manufacturer Mechatronics trainee
- Developed a physical (mass-spring-damper) model of an industrial robot
  - Diagnosed & fixed vibrations issue by reprogramming (PLC) the robot motors
- 2015 6 months SNCF, train maintenance Project management trainee
- Benchmarked Machine Learning solutions for predictive maintenance



## Personality

- Curious, I have developed my intercultural skills through a semester in Finland, bikepacking around Europe and working in the Netherlands for 2 years
- Team player and creative, I like to share my knowledge through visually-appealing media (infographics, videos, interactive dashboard)
- I learn to be goal-oriented by practicing sports in competition (triathlon)
- I acquired a meticulous mindset by fulfilling the entire electrical renovation of my flat allowing me to obtain the Consuel certificate

