

# Fabien Furfaro | Lead Data & AI Engineer

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in <http://linkedin.com/in/fabien-furfaro/>

## Profile

Holding a PhD in Physics with a focus on computer vision and statistics, I have a strong foundation in electronics from Enedis and Vinci. My experience includes architecting AI optimization solutions and leading reinforcement learning and generative AI projects at Capgemini, as well as designing recommendation systems based on constrained optimization at Thales. For aerospace clients, I drive pre-sales and solution architecture.

## Key Skills

**Technical:** AI, ML, Deep Learning, Reinforcement Learning, Generative AI, NLP, Computer Vision, Anomaly Detection, Constrained Optimization, Python, PyTorch, TensorFlow, Simulink, MLFlow, Azure, Docker, GitLab, CAN Bus.

**Functional:** Research & Science, Agile PM, V-cycle, Backlog Refinement, Business model, MLOps.

**Languages:** French (native), English (professional)

## Professional Experience

### Aerospace

*Pre-Sales Solution Architect*

06/2025–Present

- Collaborated with sales to translate business needs into technical solutions and demos.
- Supported proposal design and technology demonstrations for strategic decisions.

### Capgemini

*Lead Data Scientist*

01/2025–06/2025

- Architected a recommendation system integrating constrained optimization and anomaly detection.
- Managed ML and data industrialization in defense environment.

### Thales Group

*Senior Data Scientist*

06/2024–01/2025

- Developed and deployed machine learning and deep learning solutions from data to production.
- Managed MLOps, statistics, and agile workflows.

### Capgemini Engineering (APA)

*Project Leader - AI Researcher*

09/2022–09/2024

- Developed automotive cooling systems and intelligent supervision.
- Led project management and research activities.

### INSEP / CNAM

*Machine Learning Researcher*

09/2019–09/2022

- Created evolutionary algorithms for neural network functionalization.

### ENS (Grande écoles)

*Internship in Biotech*

04/2024–09/2014

- Created evolutionary algorithms for neural network functionalization.

### Axians (Vinci)

*Electronic Designer*

2010–2012

### ERDF (Enedis)

*Electrotechnician*

2008–2010

## Education

### Université de Paris Cité

*PhD in Physics, specializing in Complex system*

2015–2019

- How to control and track cell differentiation in microfluidics chip.

### Université de Paris Cité

*Master's Degree in Applied Physics*

2013–2015

### Université Paris Diderot

*Bachelor's Degree in Physics*

2012–2013

**Lycée St Nicolas**  
*BTS in Electrotechnics*

*2010–2012*

**Lycée St Nicolas**  
*School Diploma in Electrotechnics*

*2008–2010*