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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 (Airbus, Liebherr Aerospace, etc.), I drive pre-sales, solution architecture, and advanced knowledge management initiatives utilizing graph technologies and large language models.

## **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.	
<ul> <li>Supported proposal design and technology demonstrations for strategic decisions.</li> </ul>	
Capgemini	01 /0005 06 /0005
Lead Data Scientist	01/2025-06/2025
<ul> <li>Architected a recommendation system integrating constrained optimization and anomaly detection.</li> <li>Managed ML and data industrialization in defense environment.</li> </ul>	
Thales Group	
Senior Data Scientist	06/2024-01/2025
<ul> <li>Developed and deployed machine learning and deep learning solutions from data to production.</li> <li>Managed MLOps, statistics, and agile workflows.</li> </ul>	
Capgemini Engineering (APA)	
Project Leader - Al Researcher	09/2022-09/2024
<ul><li>Developed automotive cooling systems and intelligent supervision.</li><li>Led project management and research activities.</li></ul>	
INSEP / CNAM	
Machine Learning Researcher	09/2019-09/2022
<ul> <li>Created evolutionary algorithms for neural network functionalization.</li> </ul>	
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
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	2010 2012
School Diploma in Electrotechnics	2008–2010
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