AIBT110 - AI certification, robustness and dependability

From the Advanced Master AIBT

(Artificial Intelligence & Business Transformation)

Key elements

Period: **Mid-March**

Estimated duration: **28 hours**

For whom:
recent graduates, jobseekers and experienced employees

Location:
ISAE-SUPAERO, Toulouse

Language: **English**

Highlights

- Interpretability and explainability issues
- The human-machine couple
- Aerospace & automotive industry focus

Industrial groups building critical systems are pressed to take benefit from the performance of modern AI. But in the same time they cannot be satisfied with performance only, they need to “open the black box” and understand the content, qualify their systems, anticipate the creation of norms or certification requirements.

This module introduces the state of the art on an hyper but very recent field.

Prerequisites

- Good knowledge and acceptable practice of major Learning algorithms.

Learning objectives

After completing this course, participants will be able to:

- Understand what can and cannot be expected in the perspective of certification or qualification of systems based on AI;
- Know about the main legal initiatives on the subject;
- Understand the major technology trends underlying norms on AI;
- Be able to make links between the usual engineering validation processes performed and their use on AI.

Information and registration

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Course Content

- When Learning algorithms face the questions of robustness, interpretability and explainability, certificability: examples of successes and failures;
- Presentation of ongoing reflections on the evolution of norms, especially in the aerospace and automotive industries;
- The human/machine couple in the decision process;
- Are we ready to accept a reduced performance?

Teaching methods

Teaching methods	Yes
Lectures / tutorial	X
Collaborative learning	
Flipped classroom	
Blended learning (online and face to face)	
Learning by doing	
Project-based	X
Simulation	
Case study	

Assessment

- Written project (100%)