

## The key principles of artificial intelligence

**SII-411    3 Days (21 Hours)**

### Description

Artificial intelligence is a booming technology today. Threats or opportunities, companies today must master technologies and anticipate the uses that may arise from these technologies in order to find growth drivers or resist the arrival of new entrants. The Information Systems Department, which is at the heart of the implementation of this technology, must ensure both a monitoring and advisory role for businesses and potential users of the technologies. It must also ensure the feasibility of implementing applications at a reasonable cost consistent with the IT architecture defined by the company. This training is intended to give all DSI stakeholders the keys to understanding the challenges, technologies, technical constraints of artificial intelligence and give the keys to DSI stakeholders to support innovation projects calling on this technology.

### Who is this training for ?

#### For whom

All IT department players able to support projects integrating artificial intelligence (AI).

#### Prerequisites

None.

### Training objectives

- Understand the uses and actors of AI
- AI technologies and tools: deep-learning and machine-learning
- Integrate AI into information systems
- Lead an artificial intelligence project

### Training program

Concepts de l'Intelligence Artificielle (IA)

- The different categories of AI.
- First applications.
- Scenario: Demonstration of Chatbots, Watson, videos.

### Algorithmes et données de l'IA

- Distinguish the main AI algorithms and their use: focus on Machine Learning algorithms and Deep Learning.
- The different types of data for AI, their use: focus on Machine Learning data.
- Scenario: Application with participant data.

### Usages de l'intelligence artificielle

- Know the state of the art in the performance of AI systems in vision, language and robotics.
- Understand the role of AI in vision and customer experience. Analysis use cases.
- Scenarios: demonstration of the 360 ??Clikfox system, generating ideas for AI applications in participants' environments.

### Identifier les risques associés à l'IA

- Ethics
- Safety

### Comprendre et anticiper les impacts de l'utilisation de l'IA sur les infrastructures et les processus

- The architecture of an AI application.
- AI Databases.
- Impact on the IT system.

### Le marché de l'IA

- The actors of AI
- The role of GAFA.
- The Villani report.

### Mener un projet IA

- The approach, methods and tools specific to Artificial Intelligence projects.