

AiU® Certified Tester in Artificial Intelligence

The course is providing a good introduction and overview of artificial intelligence methods used nowadays, starting from basic definitions to the different forms of AI model testing, online as well as offline. The particularities of risks, quality attributes and strategies for testing AI applications are outlined. In the last part it is demonstrated how AI is making testing tools smarter. Following this course will lead to a broad understanding of the topic.

Détails

- **Code** : CTAI
 - **Durée** : 3 jours (21 heures)
- Public**
- Testing professionals
- Pré-requis**
- It is recommended that candidates hold the ISTQB® CTFL certificate. See ISTQB Certified Tester – Foundation Level (CTFL). — They should also have basic knowledge of a programming language (Java or Python or R).

Objectifs

- Understand current trends, industry applications of Artificial Intelligence (AI) using Machine Learning (ML).
- Compare different implemented ML algorithms to help choose the most suitable one.
- Evaluate models for both supervised and unsupervised learning.
- Design and execute test cases for AI systems.
- Use various methods for bringing transparency into model workings.

Programme

The course is structured according to the AiU Certified Tester in AI syllabus (see www.artificialintelligence-united.com). This way you can relate the topics covered in the course to the syllabus.

- Introduction to Artificial Intelligence: introducing artificial intelligence (AI), Machine Learning (ML) and Deep Learning (DL).
- Overview of testing AI systems: off-line and online testing of AI applications, data preparation and pre-processing (outlier detection, dimension reduction), imputation and visualization
- Metrics for supervised (Accuracy, Precision, Recall/sensitivity, Specificity and F1-score) and unsupervised learning (Inertia and Rand score, Support, Confidence and Lift metrics) to find the best AI model
- Explainable AI: examination and evaluation of complex (DL models) models by varying input variables and observing variations in outcomes while constructing a simple interpretable model
- Risks and test strategy for AI systems
- AI in testing: application of AI in the test process itself, smart dashboards and test automation tools

Modalités

- **Type d'action** :Acquisition des connaissances
- **Moyens de la formation** :Formation présentielle – 1 poste par stagiaire – 1 vidéo projecteur – Support de cours fourni à chaque stagiaire
- **Modalités pédagogiques** :Exposés – Cas pratiques – Synthèse
- **Validation** :Exercices de validation – Attestation de stages