



# ARTIFICIAL INTELLIGENCE PROFESSIONAL CERTIFICATE



CAIPC® Version 062021

**CertiProf**®

## Introduction:

In 1959, Arthur Samuel, a computer scientist who pioneered the study of artificial intelligence, described machine learning as “the study that gives computers the ability to learn without being explicitly programmed.” Alan Turing’s seminal paper (Turing, 1950) introduced a benchmark standard for demonstrating machine intelligence, such that a machine has to be intelligent and responsive in a manner that cannot be differentiated from that of a human being.

Machine Learning is an application of artificial intelligence where a computer/machine learns from the past experiences (input data) and makes future predictions. The performance of such a system should be at least at human level.

This certification focuses on clustering problems for unsupervised machine learning with K-Means algorithm. For Supervised machine learning we will describe the classification problem with a demonstration of design trees algorithm and the regression one with an example of linear regression.



### Learning Objectives:

- Understand the fundamentals of artificial Intelligence and machine learning
- Describe the methods of machine learning: supervised and unsupervised
- Use the data analysis for decision-Making
- Understand the limits of algorithms
- Understand and grasp Python programming, essential mathematics knowledge in AI, basic programming methods



### Target Audience:

- Anyone interested in expanding their knowledge in artificial intelligence and Machine
- Engineers, analysts, marketing managers
- Data Analysts, Data Scientists, Data Stewards
- Anyone interested in Data Mining and Machine Learning techniques



### Prerequisites:

There are no formal prerequisites for this certification.



### Training:

- Course Type: Professional
- Certification Code: CAIPC<sup>®</sup>
- Expiration: 3 years



### Certification Exam:

- Format: Multiple choice
- Questions: 40
- Language: English, spanish and portuguese
- Pass Score: 32/40 or 80 %
- Duration: 60 minutes
- Open book: No
- Delivery: This examination is available online
- Supervised: it will be at the discretion of the Partner