5 Days

Certified Artificial Intelligence Practitioner™ (CAIP)

Upcoming Sessions

10-14 Jun 2024	Dubai - UAE	$5,950
09-13 Dec 2024	Dubai - UAE	$5,950
14-18 Apr 2025	London - UK	$5,950

Training Details

Training Course Overview

Artificial intelligence (AI) and machine learning (ML) have become essential parts of the toolset for many organizations. When used effectively, these tools provide actionable insights that drive critical decisions and enable organizations to create exciting, new, and innovative products and services. This Anderson training course shows you how to apply various approaches and algorithms to solve business problems through AI and ML, all while following a methodical workflow for developing data-driven solutions.

To ensure your success in this course, specific prerequisites are mandatory to take. The program prerequisites can be accessed and viewed by visiting the following hyperlinked file: CAIP Prerequisites***, and*** CertNexus Exam Blueprints***.***

Training Course Objectives

At the end of this Anderson training course, you will develop AI solutions for business problems.

You will:

- Solve a given business problem using AI and ML.
- Prepare data for use in machine learning.
- Train, evaluate, and tune a machine learning model.
- Build linear regression models.
- Build forecasting models.
- Build classification models using logistic regression and *k* -nearest neighbor.
- Build clustering models.
- Build classification and regression models using decision trees and random forests.
- Build classification and regression models using support-vector machines (SVMs).
- Build artificial neural networks for deep learning.
- Put machine learning models into operation using automated processes.
- Maintain machine learning pipelines and models while they are in production.

Designed For

The skills covered in this training course converge on four areas—software development, IT operations, applied math and statistics, and business analysis. Target participants for this course should be looking to build upon their knowledge of the data science process so that they can apply AI systems, particularly machine learning models, to business problems.

So, the target participant is likely a data science practitioner, software developer, or business analyst looking to expand their knowledge of machine learning algorithms and how they can help create intelligent decision-making products that bring value to the business.

A typical participant in this course should have several years of experience with computing technology, including some aptitude in computer programming.

This Anderson training course is also designed to assist participants in preparing for the CertNexus® Certified Artificial Intelligence (AI) Practitioner (Exam AIP-210) certification.

Training Details

Day One:

Solving Business Problems Using AI and ML

- Identify AI and ML Solutions for Business Problems
- Formulate a Machine Learning Problem
- Select Approaches to Machine Learning

Preparing Data

- Collect Data
- Transform Data
- Engineer Features
- Work with Unstructured Data

Day Two:

Training, Evaluating, and Tuning a Machine Learning Model

- Train a Machine Learning Model
- Evaluate and Tune a Machine Learning Model

Building Linear Regression Models

- Build Regression Models Using Linear Algebra
- Build Regularized Linear Regression Models
- Build Iterative Linear Regression Models

Building Forecasting Models

- Build Univariate Time Series Models
- Build Multivariate Time Series Models

Day Three:

Building Classification Models Using Logistic Regression and k-Nearest Neighbor

- Train Binary Classification Models Using Logistic Regression
- Train Binary Classification Models Using k-Nearest Neighbor
- Train Multi-Class Classification Models
- Evaluate Classification Models
- Tune Classification Models

Building Clustering Models

- Build k-Means Clustering Models
- Build Hierarchical Clustering Models

Building Decision Trees and Random Forests

- Build Decision Tree Models
- Build Random Forest Models

Day Four:

Building Support-Vector Machines

- Build SVM Models for Classification
- Build SVM Models for Regression

Building Artificial Neural Networks

- Build Multi-Layer Perceptrons (MLP)
- Build Convolutional Neural Networks (CNN)
- Build Recurrent Neural Networks (RNN)

Day Five:

Operationalizing Machine Learning Models

- Deploy Machine Learning Models
- Automate the Machine Learning Process with MLOps
- Integrate Models into Machine Learning Systems

Maintaining Machine Learning Operations

- Secure Machine Learning Pipelines
- Maintain Models in Production

Accreditation

The Certificate

- Anderson Certificate of Completion for delegates who attend and complete the training course
- CertNexus Certificate will be issued to those delegates who successfully pass Exam AIP-210

INFO & IN-HOUSE SOLUTION

For more information about this course, call or email us at:

Call us: +971 4 365 8363

Email: info@anderson.ae

Request for a Tailor-made training and educational experience for your organization now:

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