

# **HCIA-Artificial Intelligence (AI)**

**Duration: 5 Days** 

## **Prerequisites:**

- Be familiar with basic operations on Linux operating systems
- Possess the basic knowledge of advanced mathematics, and have studied the pre-curriculum of Mathematics
- Familiar with python language, have studied the precourse of "Python Basics"

# **Course Objectives:**

On completion of this program, the participants will be able to:

- Understand the overview of AI
- To solve the tasks of different types, understand the whole process from data acquisition and processing, model building to result output and evaluation
- Understand the overview of Deep Learning
- Basic understanding of TensorFlow 2.1.0, Pytorch, MindSpore framework, can realize simple application
- Understand Huawei's strategic layout in artificial intelligence and Huawei Cloud EI
- Understand Huawei Ascend series products
- Master the basic functions of the Atlas development board
- Understand HUAWEI HiAI
- Understand HUAWEI EI

### **Intended Audience:**

- Those who hope to become AI engineers
- Those who hope to obtain an HCIA-AI certificate
- Those who hope to know how to use, manage, and maintain Huawei AI products and AI cloud services

#### **Course Outlines:**

## **AI OVERVIEW**

- AT Overview
- Technical Fields and Application Fields of AI
- Huawei's AI Development Strategy
- AI Disputes
- Future Prospects of AI

#### **MACHINE LEARNING OVERVIEW**

- Machine Learning Definition
- Machine Learning Types
- Machine Learning Process
- Other Key Machine Learning Methods
- Common Machine Learning Algorithms
- Case Study

#### **DEEP LEARNING OVERVIEW**

- Deep Learning Summary
- Training Rules
- Activation Function
- Regularization
- Optimizer
- Types of Neural Network
- Common Problems

#### MAINSTREAM DEVELOPMENT FRAMEWORKS FOR AI

- Mainstream Development Frameworks
- TensorFlow 2 x Basics
- Common Modules of TensorFlow 2 x
- Basic Steps of Deep Learning Development

### **HUAWEI AI DEVELOPMENT FRAMEWORK MINDSPORE**

- MindSpore Development Framework
- MindSpore Development and Application

#### **HUAWEI AI COMPUTING PLATFORM ATLAS**

- Overview of AI Chips
- Hardware Architecture of Ascend Chips
- Software Architecture of Ascend Chips
- Huawei Atlas AI Computing Platform
- Industry Applications of Atlas

#### **HUAWEI OPEN AI PLATFORM FOR SMART DEVICES**

- AI Industry Ecosystem
- Huawei HiAI Platform
- Developing Apps Based on Huawei HiAI Platform

# HUAWEI CLOUD ENTERPRISE INTELLIGENCE APPLICATION PLATFORM

- Overview of HUAWEI CLOUD EI
- ModelArts
- HUAWEI CLOUD EI Solutions