Enterprise Computing Solutions - Education Services

TRAINING OFFERING

You can reach us at:

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AI CERTs® AI+ Developer™

CODE:	LENGTH:	PRICE:
EDU-AIC-AT-310	8 Hours (1 day)	$495.00

Description

Get hands-on with the tools and technologies that power the AI ecosystem. Core AI Foundations: Covers Python, deep learning, data processing, and algorithm design Hands-on Projects: Focus on NLP, computer vision, and reinforcement learning Advanced Modules: Includes time series, model explainability, and cloud deployment Industry-Ready Skills: Prepares learners to design and deploy complex AI systems

Objectives

Master Key AI Development Skills: Learn Python, deep learning, advanced concepts, and optimization techniques to build robust AI solutions. Specialize in Cutting-Edge AI Domains: Gain expertise in NLP, computer vision, or reinforcement learning, alongside data processing, exploratory analysis, and time series analysis. Stay Ahead in AI Development: AI is transforming industries, and organizations seek developers with strong proficiency in deploying AI models to solve real-world problems. Advance Your Career in AI Development: With growing demand across tech, finance, and healthcare sectors, this certification positions you as a leader in AI-driven development.

Audience

Software Developers: Enhance your coding expertise by mastering AI algorithms and deep learning techniques. Data Enthusiasts: Apply AI-driven data analysis, machine learning models, and deep learning to solve complex problems. Computer Vision & NLP Researchers: Dive into specialized AI fields, including computer vision and natural language processing. IT Specialists & System Architects: Integrate AI solutions into existing systems and optimize performance. Students & Fresh Graduates: Build a strong foundation in AI development and prepare for future opportunities in tech.

Prerequisites

Basic math, including familiarity with high school-level algebra and basic statistics, is desirable. Understanding basic programming concepts such as variables, functions, loops, and data structures like lists and dictionaries is essential. A fundamental knowledge of programming skills is required.

Program

Course Overview Course Introduction Module 1: Foundations of Artificial Intelligence 1.1 Introduction to AI 1.2 Types of Artificial Intelligence 1.3 Branches of Artificial Intelligence 1.4 Applications and Business Use Cases Module 2: Mathematical Concepts for AI 2.1 Linear Algebra 2.2 Calculus 2.3 Probability and Statistics 2.4 Discrete Mathematics Module 3: Python for Developer 3.1 Python Fundamentals 3.2 Python Libraries Module 4: Mastering Machine Learning 4.1 Introduction to Machine Learning 4.2 Supervised Machine Learning Algorithms 4.3 Unsupervised Machine Learning Algorithms 4.4 Model Evaluation and Selection Module 5: Deep Learning 5.1 Neural Networks 5.2 Improving Model Performance 5.3 Hands-on: Evaluating and Optimizing AI Models Module 6: Computer Vision 6.1 Image Processing Basics 6.2 Object Detection 6.3 Image Segmentation 6.4 Generative Adversarial Networks (GANs) Module 7: Natural Language Processing 7.1 Text Preprocessing and Representation 7.2 Text Classification 7.3 Named Entity Recognition (NER) 7.4 Question Answering (QA) Module 8: Reinforcement Learning 8.1 Introduction to Reinforcement Learning 8.2 Q-Learning and Deep Q-Networks (DQNs) 8.3 Policy Gradient Methods Module 9: Cloud Computing in AI Development 9.1 Cloud Computing for AI 9.2 Cloud-Based Machine Learning Services Module 10: Large Language Models 10.1 Understanding LLMs 10.2 Text Generation and Translation 10.3 Question Answering and Knowledge Extraction Module 11: Cutting-Edge AI Research 11.1 Neuro-Symbolic AI 11.2 Explainable AI (XAI) 11.3 Federated Learning 11.4 Meta-Learning and Few-Shot Learning Module 12: AI Communication and Documentation 12.1 Communicating AI Projects 12.2 Documenting AI Systems 12.3 Ethical Considerations Optional Module: AI Agents for Developers 1. Understanding AI Agents 2. Case Studies 3. Hands-On Practice with AI Agents

Session Dates

On request. Please Contact Us

Additional Information

This training is also available as onsite training. Please contact us to find out more.