AI+ Network™

The AI+ Network™ certification provides professionals with the basic knowledge and advanced skills needed to understand the combination of artificial intelligence and current networking technologies. It discusses fundamental networking concepts, newer technologies such as SDN and NFV, and how AI can enhance network efficiency. Important focus areas consist of AI-powered network automation, orchestration, and security upgrades, combined with hands-on projects and practical labs for real-life implementation. The class ends by examining new developments and upcoming pathways in AI-enhanced networking, getting students ready for leading positions in this quickly changing sector.

Course Duration:

5 Days

Prerequisites:

- Basic understanding of networking fundamentals.
- Familiarity with programming languages such as Python.
- Fundamental knowledge of AI and machine learning concepts.
- Experience with network management tools and technologies is a plus.

Course Objectives:

- You will gain a deep understanding of AI-driven networking technologies.
- Master the skills needed to implement advanced networking solutions in real-world environments.
- Proficiency in automating and orchestrating network functions using AI will be within your reach.
- Learn how to enhance network security through AI-powered techniques.
- Apply cutting-edge solutions such as Software-Defined Networking (SDN) and Network Functions Virtualization (NFV).
- Be equipped to lead innovative networking initiatives and optimize network performance.
- Stay ahead of emerging trends in networking technologies to remain competitive.
- Position yourself as an expert in AI-enhanced networking systems.

Course Outlines:

Module 1: Networking Foundations

- 1.1 Basic Networking Concepts
- 1.2 Networking Protocols and Standards
- 1.3 Network Infrastructure and Design
- 1.4 Introduction to Network Security

Module 2: Advanced Networking Technologies

- 2.1 Network Virtualization and Cloud Networking

- 2.2 Emerging Network Architectures
- 2.3 Advanced Routing and Switching
- 2.4 Network Storage and Data Centers

Module 3: AI in Networking

- 3.1 Introduction to AI and Machine Learning
- 3.2 AI-Driven Network Optimization
- 3.3 AI for Network Security and Threat Detection
- 3.4 AI-Enhanced Network Management

Module 4: Network Automation and Orchestration

- 4.1 Fundamentals of Network Automation
- 4.2 AI-Driven Network Orchestration
- 4.3 Policy-Driven Network Management
- 4.4 Case Studies in Network Automation

Module 5: AI-Enhanced Network Security

- 5.1 Advanced Threat Detection with AI
- 5.2 Secure Network Design and Architecture
- 5.3 AI for Cybersecurity Intelligence
- 5.4 Ethical Considerations in AI-Driven Security

Module 6: Practical Labs and Hands-On Projects

- 6.1 Network Simulation and Emulation
- 6.2 AI-Driven Network Automation Projects
- 6.3 AI for Network Security Projects
- 6.4 Capstone Project (Using Google Colab and Azure cloud)

Module 7: Emerging Trends and Future Directions

- 7.1 Future of AI in Networking
- 7.2 AI-Powered IoT Networks
- 7.3 Blockchain and AI in Networking
- 7.4 Continuous Learning and Career Development

Who should attend

- HR Professionals: Enhance your HR processes by integrating AI tools that improve recruitment, employee engagement, and workforce management.
- Talent Acquisition Specialists: Leverage AI to find, assess, and engage candidates more effectively, ensuring the best talent for your organization.
- People Analytics Experts: Apply AI-driven analytics to enhance decision-making in HR, from performance reviews to predictive workforce trends.
- Business Leaders: Learn to implement AI strategies that streamline HR operations and align talent management with business objectives.
- Students & New Graduates: Build a competitive resume by mastering AI-driven HR solutions and preparing for a future in HR tech.