Thrivedx

Practical Use of Al in Cyber Course



Practical Use of AI in Cyber Course



This program delves into the transformative potential impact of AI on cybersecurity, offering participants a comprehensive understanding of foundational principles, cutting-edge applications, and the practical use of AI technologies in combating cyber threats. Through a series of interactive modules, the course bridges theoretical concepts with real-world scenarios, equipping participants with the skills to implement AI-driven cybersecurity solutions effectively. Attendees will emerge with enhanced abilities to leverage AI for threat detection, response, and management, positioning them at the forefront of innovation in cybersecurity practices.

Who Should Attend:

- Cybersecurity professionals
- Ethical hackers
- IT professionals
- Web developers

Prerequisites:

- Understanding of basic cybersecurity principles, including threat landscapes, security protocols, and common cybersecurity measures
- Familiarity with programming concepts
- Knowledge of networking fundamentals

Relevant for the Following Work Paths:

- Vulnerability and Penetration Testers
- Cybersecurity Consultants
- Cybersecurity Analysts and Engineers
- Information Security Managers
- Al and Machine Learning Specialists in Cybersecurity





Upon Completion, Participants Will Emerge With:

1

Insight into Al's Role in Cybersecurity:

Participants will gain a clear understanding of how AI is applied across various aspects of cybersecurity, such as threat detection and vulnerability management.



Future Threat Preparedness: Participants will leave with an updated view of potential future threats and the role of AI in combating them, ensuring they remain adaptable and forwardthinking in their approach to cybersecurity.



Familiarity With AI Tools: Participants learn to navigate and apply AI tools in cybersecurity tasks, improving efficiency and effectiveness in threat response.



Practical AI Application Skills: Through practical exercises and case studies, attendees will learn how to implement AI solutions, equipping them with hands-on experience for real-world challenges.



Analytical Skill Enhancement: The program aims to sharpen participants' ability to analyze cyber threats using AI, fostering stronger problem-solving skills.



Awareness of Ethical and Legal

Considerations: A segment dedicated to the ethical and legal aspects of AI in cybersecurity will prepare participants to make informed, responsible decisions in their work.







Program Structure

Module 1

How AI Is Affecting Cybersecurity

- History and Evolution of AI in Cybersecurity
- Difference Between Traditional Cybersecurity and AI-Enhanced Cybersecurity
- Key AI Technologies and Their Roles in Cybersecurity
- OWASP Top 10 for LLM Applications and MITRE ATLAS
- NIST AI Risk Management Framework

Module 2

Modern Phishing With Al

- Natural Language Processing for Phishing Detection
- Phishing Detection Workshop
- Evolving Techniques in AI-Based Phishing Attacks

Module 3

AI for Threat Detection and Response

- Implementing AI for Real-Time Threat Detection
- Enhancing Incident Response With AI
- Case Studies: Successful AI Deployment in Threat Detection
- Building and Training Models for Specific Threat Landscapes
- Anomaly Detection Using AI

Module 4

Implementing AI in Cybersecurity Operations

- Integration of AI Tools With Existing Cybersecurity Infrastructure
- Custom AI Solutions for Cybersecurity
- Future Trends in AI for Cybersecurity

Module 5

Ethical and Legal Considerations in Al-Powered Cybersecurity

- Data Privacy and AI in Cybersecurity
- Ethical Use of AI Technologies
- Regulatory Compliance for AI Systems
- Al Sandboxes and Local Al Solutions for Enterprises
- Securing Inhouse/Open Source LLMs

Module 6

Al in Vulnerability Management and Assessment

- Enhancing Vulnerability Scans With AI
- Risk Assessment Models Using ML
- Prioritizing Vulnerabilities With AI
- Patch Management via Al





Certification Readiness

All participants who complete the course will receive a **ThriveDX Course Completion Certification**, and participants who complete the final accreditation exam will receive a **ThriveDX Practical Al in Cyber Certification**.





Embedded Labs and Challenges

The course includes our state-of-the-art proprietary cloud-based digital education platform, **TDX Arena**, in which real-life scenarios and advanced tech teaching meet in a gamified environment.









