

Mastering AI Security Boot Camp

(TTAI2820)

Category: AI, Data & Analytics | **Vendor:** Trivera Tech

Duration: 24.00 hours (3 days)

19.5 CPD Hours

Rating: ★ 4.6 (5,878 reviews)

Course Information

Delivery Format: Instructor Led - Online

Course Overview

The®Mastering AI Security Boot Camp, a three-day course geared for technical users keen to explore the intersection of artificial intelligence and cybersecurity. With AI transforming the cybersecurity landscape, a deep understanding of AI in security can enhance your efficiency in tackling security issues, formulating defense strategies, and fortifying your organization's security stance. Whether you're tackling security issues, designing advanced defense mechanisms, or simply looking to stay ahead of the curve, these skills can streamline your daily tasks and significantly contribute to your organization's security posture.

About This Course

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Working in a hands-on learning environment guided by our AI security expert, you'll explore AI in cybersecurity, AI threats and vulnerabilities, defense mechanisms, forensics, incident response for AI systems, and future trends in AI security. You'll gain an understanding of AI's role in security and threat intelligence, enabling you to better predict and understand emerging threats, resulting in proactive rather than reactive defense strategies. You'll also learn about AI vulnerabilities and their mitigation. Identifying potential weaknesses in AI systems allows for more robust security measures, reducing the risk of breaches. You'll also master incident response for AI systems. Handling security incidents effectively can drastically reduce the potential damage caused by breaches, ensuring business continuity.

The hands-on labs are designed to provide real-world scenarios that simulate challenges faced in the field. You will be analyzing AI-driven threats, identifying vulnerabilities in AI systems, designing an AI-driven Intrusion Detection System, conducting a basic AI forensic analysis, and developing an incident response plan for an AI system. Tools and skills used in the class include Python, Scikit-learn and open-source threat intelligence platforms. Upon completing the course you'll be well equipped to understand and mitigate AI threats, design and implement AI defense systems, and effectively respond to incidents in AI systems.

Who Should Attend

This intermediate-level course is a fit for experienced cybersecurity professionals, system administrators, developers and IT managers seeking to enhance their understanding of artificial intelligence in the context of security. Individuals in roles responsible for threat analysis, incident response, and system defense will find the course particularly beneficial.

Prerequisites & Entry Requirements

General Prerequisites:

To ensure a smooth learning experience and maximize the benefits of attending this course, you should have the following prerequisite skills:

- A foundational understanding of artificial intelligence, including the basic principles, applications, and types of AI.
- Familiarity with basic cybersecurity principles, understanding of threats, defense mechanisms, and incident response.
- Basic Python programming skills and / or a general comfort with coding
- Basic knowledge of computer networks, systems, and how they interact
- Some basic experience in data analysis or basic statistical concepts.

Learning Outcomes

Upon successful completion of this course, participants will be able to:

Gain a clear understanding of AI and its integral role in the realm of cybersecurity, providing a solid foundation for the rest of the course.

- Learn to identify and understand various types of AI threats and vulnerabilities, improving your ability to predict and mitigate potential risks.
- Acquire the knowledge to design and implement robust AI defense mechanisms and AI Driven Intrusion Systems (IDS), equipping you to safeguard your systems effectively.
- Delve into the fascinating world of AI forensics and learn how to conduct basic forensic analyses on AI systems.
- Master the art of creating and executing incident response plans for AI systems, a vital skill for any security professional.
- Learn specific techniques to detect deepfakes and understand their potential security implications, equipping you to counter one of the emerging threats in the AI security landscape.
- Get hands-on experience with innovative open-source tools such as Python, Scikit-learn, and Suricata IDS, enhancing your ability to use these tools effectively in AI security.
- Get insights into future trends in AI security, ensuring that you're well-prepared for what's around the corner in this rapidly evolving field.

Detailed Course Outline

Introduction to AI in Security

Understand the role of AI in the field of cybersecurity and the evolution of threats.

The basics of AI and its relevance to security

Cybersecurity landscape: traditional threats vs. AI-enabled threats

Real world examples of AI in security

Understanding the role of AI in Threat Intelligence

Lab: Simulating AI-driven threat analysis using open-source threat intelligence tools

Playing Detective: Identifying AI Threats and Vulnerabilities

Grasp the inherent threats and vulnerabilities of AI systems

Understanding the different types of AI threats

Learning about common AI vulnerabilities

Exploring case studies of major AI-based security breaches

AI and data privacy concerns

Lab: Identifying vulnerabilities in an AI system (2:30 - 4:00)

Tools Used in Lab: Python, Scikit-learn, OWASP Dependency-Check

Building the AI Fortress: Defense Mechanisms 101

Gain knowledge on how to safeguard AI systems from security threats.

Importance of AI Security Measures

Learning about AI Defense Mechanisms

AI in intrusion detection and prevention systems & AI in risk assessment and vulnerability management

Lab: Designing a basic AI-driven Intrusion Detection System

CSI Cyber: A Foray into AI Forensics

Understand how forensic techniques are applied in AI security.

The role of forensics in AI Security

Basics of AI Forensic Analysis

Case studies of forensic analysis in AI security incidents

AI in forensic data analysis

Lab: Conducting a simple forensic analysis on an AI system

Crisis Averted: Crafting Your AI Incident Response Plan

Learn how to respond to incidents in AI systems effectively.

Basics of Incident Response (IR) in AI systems

AI in IR: Automated and adaptive response

Designing an incident response plan for AI systems

Lab: Creating a mock incident response plan for an AI system

What's Next Preparing for Future AI Security Challenges

Get insights into the future trends of AI in cybersecurity.

Future threats: Deepfakes, autonomous weapons, etc.

AI in quantum computing security

AI-driven Security Orchestration, Automation, and Response (SOAR)

The role of AI in zero-trust architectures

Lab: Simulating the detection of a deepfake

Course Wrap

Next steps in becoming an AI Security Expert

Additional Course Details

Nexus Humans Mastering AI Security Boot Camp (TTAI2820) training program is a workshop that presents an invigorating mix of sessions, lessons, and masterclasses meticulously crafted to propel your learning expedition forward.

This immersive bootcamp-style experience boasts interactive lectures, hands-on labs, and collaborative hackathons, all strategically designed to fortify fundamental concepts.

Guided by seasoned coaches, each session offers priceless insights and practical skills crucial for honing your expertise. Whether you're stepping into the realm of professional skills or a seasoned professional, this comprehensive course ensures you're equipped with the knowledge and prowess necessary for success.

While we feel this is the best course for the Mastering AI Security Boot Camp (TTAI2820) course and one of our Top 10 we encourage you to read the course outline to make sure it is the right content for you.

Additionally, private sessions, closed classes or dedicated events are available both live online and at our training centres in Dublin and London, as well as at your offices anywhere in the UK, Ireland or across EMEA.

Frequently Asked Questions

Q: What delivery options are available for Mastering AI Security Boot Camp (TTAI2820)?

We offer multiple delivery formats:

- Live Instructor-Led Classroom Online (Virtual/Live Online)
 - Traditional Instructor-Led Classroom Training (ILT)
 - On-site delivery at your offices anywhere in United Kingdom
 - Private dedicated courses customized for your team
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Q: How many CPD hours does this course provide?

The 3-day Mastering AI Security Boot Camp (TTAI2820) course provides up to 19.5 CPD hours of structured learning. CPD certificates can be provided upon request.

Q: What is the duration of the Mastering AI Security Boot Camp (TTAI2820) training?

The training takes place over 3 day(s), with each day lasting approximately 24.00 hours including breaks for lunch and refreshments.

Q: Do you provide corporate training for Mastering AI Security Boot Camp (TTAI2820)?

Yes, we provide corporate training, dedicated training, and closed classes for Mastering AI Security Boot Camp (TTAI2820). Training can take place anywhere in United Kingdom including London, Manchester, Birmingham, Edinburgh, or live online allowing teams from across United Kingdom or internationally to attend.

Q: What related terms do people search for?

Popular related searches include: AI; Machine Learning; Security

Q: Why choose Nexus Human for Mastering AI Security Boot Camp (TTAI2820)?

Nexus Human is recognized as one of the leading training providers. Our trainers have won multiple awards including:

- Small Firms Best Trainer Award
- National Training Partner of the Year (Ireland) - Multiple Years
- Global Top 30 Instructor Awards (2012, 2019, 2021)
- Tech Excellence Award Nominations
- Learning Performance Institute (LPI) External Training Provider Sponsor 2024

Q: Are there any discount codes available?

Yes! Use discount code **PENPAL5** when booking your Mastering AI Security Boot Camp (TTAI2820) training. Please note that only one discount code can be used per booking and cannot be combined with other special offers.

Nexus Human

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