

Course No. 1206

Explainable AI (XAI) Training Course

AI GOVERNANCE, ETHICS & RISK
ARTIFICIAL INTELLIGENCE & APPLICATIONS

DURATION

5 Days

DELIVERY

Classroom



Course Overview

The Explainable AI (XAI) Training Course is a comprehensive professional development program designed to equip executives, AI professionals, data scientists, machine learning engineers, business leaders, governance specialists, compliance officers, auditors, risk managers, and decision-makers with the knowledge and practical skills required to develop, evaluate, and implement transparent, interpretable, and trustworthy Artificial Intelligence systems. As AI becomes increasingly responsible for high-impact business and operational decisions, organizations must ensure that AI models are understandable, accountable, and capable of providing meaningful explanations that build confidence among users, regulators, customers, and stakeholders.

Government entities, ministries, public sector organizations, banks and financial institutions, oil and gas companies, healthcare providers, manufacturers, telecommunications companies, transportation authorities, and multinational corporations are deploying increasingly sophisticated AI models to automate processes, improve decision-making, optimize operations, detect fraud, manage risks, and enhance customer services. However, highly complex AI models often operate as "black boxes," making it difficult to understand how predictions and decisions are generated. This lack of transparency can create challenges related to governance, regulatory compliance, risk management, ethics, privacy, accountability, and stakeholder trust. Explainable AI addresses these challenges by making AI systems more transparent, interpretable, auditable, and aligned with responsible AI principles.

This course provides a practical framework for implementing Explainable AI across the entire AI lifecycle. Participants will explore the principles of model interpretability, transparency, feature importance, local and global explanations, bias detection, fairness evaluation, Responsible AI, AI governance, model validation, regulatory expectations, risk management, human-centered AI, and continuous monitoring. The course also examines widely adopted Explainable AI techniques, enterprise implementation strategies, and international best practices that help organizations develop trustworthy AI solutions while maintaining high levels of performance and compliance.

The Explainable AI (XAI) Training Course combines strategic knowledge with practical implementation through interactive workshops, real-world case studies, model interpretation exercises, governance discussions, and implementation planning sessions. By the end of the course, participants will be capable of designing AI systems that are explainable, transparent, auditable, secure, and aligned with organizational governance objectives, enabling responsible innovation while strengthening operational performance, regulatory readiness, and stakeholder

confidence.

Objectives

- Analyze the importance of Explainable AI within enterprise AI governance.
- Develop practical strategies for implementing explainable and transparent AI systems.
- Evaluate AI model interpretability, fairness, accountability, and trustworthiness.
- Apply Explainable AI techniques to improve model transparency and business understanding.
- Design AI governance frameworks supporting explainability and responsible AI.
- Improve organizational confidence in AI-driven decision-making processes.
- Strengthen regulatory compliance through explainable and auditable AI models.
- Implement monitoring and validation processes for Explainable AI solutions.
- Assess organizational AI explainability maturity and identify improvement opportunities.
- Align Explainable AI initiatives with enterprise governance, risk management, compliance, and digital transformation strategies.

Who Should Attend

This course is designed for executives, chief data officers, chief information officers, AI leaders, digital transformation managers, data scientists, machine learning engineers, AI developers, business analysts, governance professionals, compliance officers, internal auditors, cybersecurity specialists, legal advisors, enterprise architects, technology consultants, innovation managers, and professionals responsible for developing, deploying, auditing, or governing Artificial Intelligence systems.

The program is particularly valuable for professionals working in government entities, ministries, public sector organizations, regulatory authorities, banks and financial institutions, oil and gas companies, healthcare organizations, manufacturing companies, telecommunications providers, transportation authorities, educational institutions, consulting firms, and multinational organizations implementing AI-driven business solutions.

Professionals responsible for AI governance, enterprise risk management, compliance, digital transformation, strategic planning, operational excellence, data governance, AI ethics, technology strategy, business intelligence, and advanced analytics will gain practical methodologies for

developing transparent, trustworthy, and explainable Artificial Intelligence capabilities.

Learning Outcomes

- By the end of this course, participants will be able to:
- Explain the principles and business value of Explainable AI.
- Differentiate between interpretable AI models and black-box AI models.
- Apply Explainable AI techniques to improve transparency and accountability.
- Evaluate AI model fairness, bias, reliability, and explainability.
- Design governance frameworks supporting Explainable AI implementation.
- Integrate Responsible AI, ethics, compliance, and transparency into AI development.
- Validate AI decisions using appropriate interpretability techniques.
- Monitor Explainable AI performance using governance and risk management metrics.
- Support regulatory compliance through transparent AI documentation and reporting.
- Develop enterprise roadmaps for implementing Explainable AI across business operations.

Course Outline

DAY 01

Foundations of Explainable AI

- Introduction to Explainable AI (XAI)
- Importance of transparency and trust in AI
- AI interpretability concepts
- Explainable AI within enterprise governance

PRACTICAL WORKSHOP ON EVALUATING AI TRANSPARENCY CHALLENGES

DAY 02

Explainability Techniques and Model Interpretation

- Local and global explanation methods
- Feature importance and model interpretation
- Model visualization techniques
- Human-centered AI explanations

PRACTICAL EXERCISE ON INTERPRETING AI MODEL DECISIONS

DAY 03

Responsible AI, Fairness, and Governance

- Responsible AI principles
- AI bias detection and fairness assessment
- Explainable AI governance frameworks
- Regulatory expectations and compliance

WORKSHOP ON DESIGNING EXPLAINABLE AI GOVERNANCE STRATEGIES

DAY 04

Validation, Monitoring, and Risk Management

- AI model validation and verification
- Explainability testing methodologies
- Continuous monitoring of AI systems
- Risk management and auditing for Explainable AI

PRACTICAL WORKSHOP ON IMPLEMENTING EXPLAINABILITY CONTROLS

DAY 05

Building an Enterprise Explainable AI Strategy

- Future trends in Explainable AI
- International best practices for trustworthy AI
- Integrating Explainable AI into enterprise AI governance and digital transformation
- Organizational change management for transparent AI adoption

FINAL WORKSHOP

Final workshop involving the development of a comprehensive Enterprise Explainable AI Strategy integrating AI governance, Responsible AI, transparency, interpretability, fairness, accountability, model validation, regulatory compliance, risk management, AI ethics, continuous monitoring, documentation, auditing, performance measurement, implementation planning, and organizational change management to establish trustworthy, transparent, explainable, and business-aligned Artificial Intelligence across the enterprise.

Register or Request More Information

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