

Exploring AI Operations: Strategies for Testing and Deploying Intelligent Systems for Success - TTAI2130

Explore AI essentials, implementation and testing scenarios, AI integration and deployment, optimizing performance and more

Duration: 2 Days

Skill Level: Intermediate

Available Format: Instructor-Led Online; Instructor-Led, Onsite In Person ; Blended; On Public Schedule

Designed to **emphasize the value of AI in operations** and **provide practical guidance on testing against AI systems**. You'll gain a solid understanding of AI and its applications, focusing on how AI can be used to streamline operations, improve decision-making, and optimize workflows.

What You'll Learn

Overview

Unlock the full potential of AI for your organization with this comprehensive two-day course, designed to emphasize the value of AI in operations and provide practical guidance on testing against AI systems. You'll gain a solid understanding of AI and its applications, focusing on how AI can be used to streamline operations, improve decision-making, and optimize workflows.

Exploring AI Operations: Strategies for Testing and Deploying Intelligent Systems for Success is a two day hands-on course that offers insights into real-world implementation and testing scenarios, equipping you with the tools and strategies necessary to ensure successful AI integration and deployment. This course focuses on

the practical application of AI rather than the programming or math that underpin the algorithms and functionality.

Throughout the event you'll explore the AI testing lifecycle, how to evaluate AI model performance, and maintain security and ethical considerations. By the end of the training, you'll have the knowledge and skills needed to harness the power of AI to drive operational excellence and effectively test AI systems.

Objectives

This course combines engaging instructor-led presentations and useful demonstrations with valuable hands-on exercises and engaging group activities. Throughout the course you'll learn how to:

- Develop the ability to identify and evaluate potential AI applications for enhancing operations within your organization, leading to improved decision-making and optimized workflows.
- Gain proficiency in designing and executing effective test plans for AI systems, ensuring the successful integration and deployment of AI models in real-world operational environments.
- Acquire the skills needed to navigate the AI testing lifecycle, from the development and validation stages to the deployment and monitoring of AI models, ensuring the reliability and quality of AI systems.
- Master the process of evaluating AI model performance using key metrics, allowing participants to assess the operational fit of AI models and strike a balance between performance, complexity, and cost.
- Develop a high-level understanding of security and ethical considerations in AI, equipping participants with the knowledge to implement AI systems responsibly and securely, mitigating potential risks and challenges.

If your team requires different topics, additional skills or a custom approach, our team will collaborate with you to adjust the course to focus on your specific learning objectives and goals.

Audience

The ideal audience for this course includes professionals involved in the development, testing, deployment, or management of technology solutions and are seeking to leverage AI and machine learning to optimize their organization's operations. Key roles that would benefit from this course include:

- Test Engineers and Quality Assurance Analysts - Individuals responsible for ensuring the quality and reliability of software and systems, who need to develop robust testing strategies for AI-driven applications.
- IT Managers and Project Managers - Professionals overseeing technology projects and teams, who want to ensure the successful integration and deployment of AI and ML in their organizations.
- Business Analysts and Operations Managers - Professionals responsible for optimizing business processes and operations, who are interested in leveraging AI and ML to enhance efficiency and productivity.
- Software Developers and Engineers - Professionals responsible for building and maintaining software solutions, who seek to incorporate AI and ML technologies into their products or services.
- Data Scientists and Analysts - Individuals working with data to generate insights and make data-driven decisions, who seek to utilize AI and ML techniques for data analysis and prediction.

Pre-Requisites

In order to be successful in the course you should possess:

- Basic understanding of technology systems in business operations: Attendees should have a foundational knowledge of technology systems, such as software applications, databases, and networks, to better comprehend AI integration and its implications in operational environments.
- Familiarity with data analysis and interpretation: Participants should have experience in working with data, including basic data analysis and interpretation skills, as AI and machine learning often involve utilizing data for decision-making and predictions.
- Problem-solving and critical thinking skills: Attendees should possess strong problem-solving and critical thinking abilities, as these skills are essential when identifying potential AI applications, designing testing strategies, and evaluating AI model performance in operational contexts.

Next Steps / Follow-on Courses: We offer a wide variety of follow-on courses for next-level AI, machine learning, analytics, intelligent automation and other related topics. Please see our **AI & Machine Learning Courses, Skills Journeys & Learning Paths** for options based on your specific role and goals.

TTAI2005	AI Basics for Everyday Business Users: Getting Started with AI Tools & Techniques
TTAI2006	AI for Business Users Boot Camp: Transforming Business Ops with Cutting-Edge AI Apps
TTAI2105	Streamline, Optimize, Succeed! AI & AIOps Automation Basics for Non-Technical Business Users
TTAI2140	Implementing AI in Software Testing AI in Test Automation
TTAI2060	Strategic AI Dialogues: Conversational Intelligence for Business Innovation

Agenda

We can collaborate with you to tune this course and level of coverage to target the skills you need most. The below agenda is estimated. Course agenda, topics and labs are subject to adjust during live delivery in response to student skill level, interests and participation.

Day 1

Introduction to AI

- What is AI?
- AI vs Machine Learning
- Types of AI: Narrow AI vs. General AI
- Popular AI and ML algorithms
- AI applications in various industries

AI and ML in the current lifecycle

- State of AI and ML today
- Recent advancements and limitations

- Future potential

AI in Operations

- Operational use cases for AI
- Integrating AI into existing workflows
- AI-driven decision making
- Identifying potential AI applications in your organization

Implementing and testing AI in companies

- Case studies of successful AI implementations
- Test cases from real-world AI rollouts
- Overcoming common challenges during AI implementation and testing
- Activity: Designing a test plan for a hypothetical AI application

Day 2

AI testing lifecycle

- Overview of the AI testing lifecycle
- Development, validation, and deployment phases
- Ensuring AI model quality and reliability
- Activity: Identifying key testing milestones in an AI project

Testing AI in an operational environment

- Preparing the test environment
- Types of tests for AI systems
- Monitoring AI system performance
- Handling AI system failures and updates
- Activity: Creating a test environment for a hypothetical AI application

Evaluating AI model goodness and performance metrics

- Key performance metrics for AI models
- Determining the operational fit of AI models
- Balancing performance, complexity, and cost
- Activity: Evaluating a sample AI model using performance metrics

Security and ethical considerations

- Security concerns in AI implementations
- Ethical considerations in AI and ML
- Strategies for ensuring AI security and ethics

Resources and next steps

- Continued learning resources
- Online courses, books, and communities
- How to stay updated on AI developments
- Closing discussion and feedback

Related Courses

TTAI2006	AI for Business Users Boot Camp: Transforming Business Ops with Cutting-Edge AI Apps
TTAI2020	AutoGPT in Action: Artificial General Intelligence (AGI) Basics for Everyday Business Use
TTAI2105	Streamline, Optimize, Succeed! AI & AIOps Automation Basics for Non-Technical Business Users
TTAI2140	Implementing AI in Software Testing AI in Test Automation
TTAI2009	Quick Start to Prompt Engineering for Business Users

All applicable course software, digital courseware files or course notes, labs, data sets and solutions, live coaching support channels and rich extended learning and post training resources are provided for you in our “easy access, no install required” high-speed **Learning Experience Platform (LXP)** remote lab and content environment. Course materials, software, resources and post-training platform access periods vary by course. Please inquire about specifics about this course.

For More Information

Please [contact us](#) or call 844-475-4559 toll free for more information about our training services (instructor-led, self-paced or blended), coaching and mentoring services, public course enrollment or questions, partner programs, courseware licensing options and more.