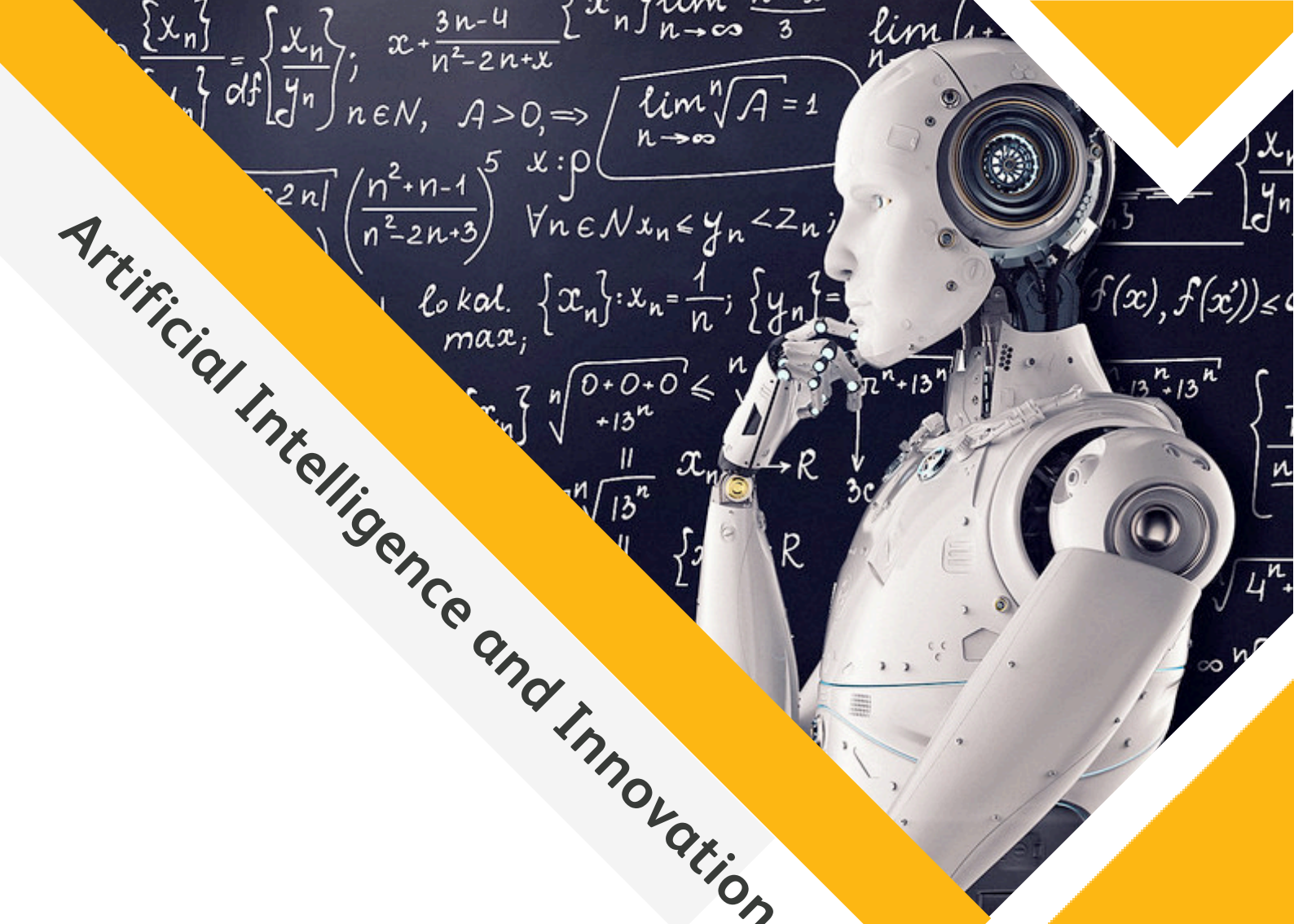
Artificial Intelligence and Innovation



Masterclass in AI and Machine Learning

- Location: London
- Date: From 13/1/2025 To 17/1/2025
- Investment: $5950 (Excluding VAT)

LONDON ROYAL ACADEMY

WWW.LONDONRA.COM

Course Introduction

"Masterclass in AI and Machine Learning" is an intensive 5-day program designed to provide participants with a comprehensive understanding of core AI and machine learning concepts, techniques, and applications. This course will equip participants with the knowledge and skills to leverage AI to solve real-world problems and drive innovation within their organizations.

Training Method

- Pre-assessment
- Live group instruction
- Use of real-world examples, case studies and exercises
- Interactive participation and discussion
- Power point presentation, LCD and flip chart
- Group activities and tests
- Each participant receives a binder containing a copy of the presentation
- slides and handouts
- Post-assessment

Course Objectives

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

- Understand the fundamental concepts of AI and machine learning: Including supervised, unsupervised, and reinforcement learning.
- Implement and evaluate key machine learning algorithms: Such as regression, classification, clustering, and deep learning models.
- Work with real-world datasets: Prepare, clean, and analyze data for machine learning models.
- Utilize popular machine learning libraries and tools: Such as Python, TensorFlow, and PyTorch.
- Develop and deploy basic machine learning models: To solve real-world problems.
- Understand the ethical and societal implications of AI and machine learning.

Who Should Attend?

This course is designed for:

- Data Scientists and Machine Learning Engineers: Seeking to enhance their skills and knowledge.
- Software Engineers: Interested in incorporating AI into their projects.
- Data Analysts: Looking to expand their skillset into machine learning.
- Researchers and Academics: Working in fields related to AI and data science.
- Individuals with a strong interest in AI and a desire to build a career in this field.

Course Outline

Day 1: Foundations of Artificial Intelligence

- Introduction to AI: Defining AI, machine learning, and deep learning.
- Types of AI: Supervised, unsupervised, and reinforcement learning.
- History and Evolution of AI: Key milestones and breakthroughs.
- AI Applications in the Real World: Examples of AI in various domains (e.g., healthcare, finance, self-driving cars).

Day 2: Machine Learning Fundamentals

- Supervised Learning:
  - Regression, classification algorithms (linear regression, logistic regression, decision trees, support vector machines).
  - Model evaluation and selection (metrics, cross-validation).
- Unsupervised Learning:
  - Clustering algorithms (k-means, hierarchical clustering).
  - Dimensionality reduction techniques (PCA).
- Hands-on Exercise:
  - Implementing simple machine learning models using Python and a library like scikit-learn.

Day 3: Deep Learning and Neural Networks

- Introduction to Deep Learning:
  - Neural networks, deep neural networks, and their architectures.
  - Convolutional Neural Networks (CNNs) for image recognition.
  - Recurrent Neural Networks (RNNs) for natural language processing.

Course Outline

- Deep Learning Frameworks:
  - Introduction to TensorFlow and PyTorch.
  - Hands-on exercise: Building and training a simple neural network

Day 4: Advanced Topics in Machine Learning

- Natural Language Processing (NLP):
  - Text classification, sentiment analysis, and machine translation.
  - Introduction to NLP libraries (e.g., NLTK, spaCy).
- Computer Vision:
  - Image classification, object detection, and image segmentation.
  - Applications of computer vision in various domains.
- Reinforcement Learning:
  - Introduction to reinforcement learning concepts.
  - Applications of reinforcement learning (e.g., game playing, robotics).

Day 5: Ethics, Challenges, and the Future of AI

- Ethical Considerations in AI:
  - Bias in AI algorithms, fairness, and accountability.
  - Privacy and security concerns.
  - The societal impact of AI.
- The Future of AI:
  - Emerging trends and technologies in AI.
  - The role of AI in various industries.
  - Career paths in AI and machine learning.

Registration & Payment

Complete & Mail to London Royal Academy or email registration@londonra.com

Registration Form

- Full Name (Mr / Ms / Dr / Eng) .....
- Position .....
- Telephone / Mobile .....
- Personal E-Mail .....
- Official E-Mail .....
- Company Name .....
- Address .....
- City / Country .....

Payment Options

- ☐ Please invoice me
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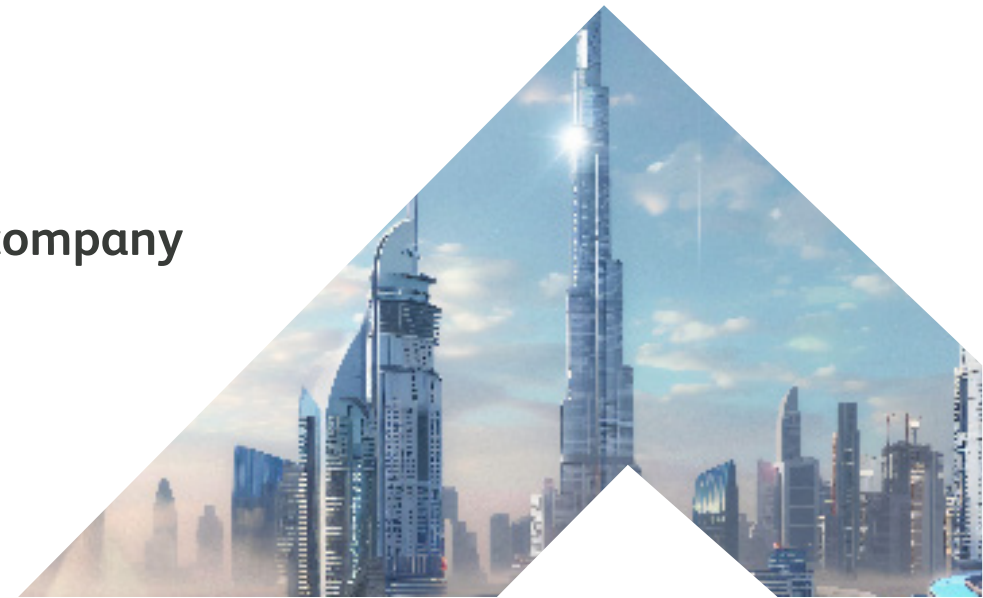

Terms & Conditions

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Cancellation and Refund Policy

Delegates have 14 days from the date of booking to cancel and receive a full refund or transfer to another date free of charge. If less than 14 days' notice is given, then we will be unable to refund or cancel the booking unless on medical grounds. For more details about the Cancellation and Refund policy, please visit www.londonra.com/terms-and-conditions/

Registration & Payment

Please complete the registration form on the course page & return it to us indicating your preferred mode of payment. For further information, please get in touch with us

Course Materials

The course material, prepared by the LRA, will be digital and delivered to candidates by email

Certificates

Accredited Certificate of Completion will be issued to those who attend & successfully complete the programme.

Travel and Transport

We are committed to picking up and dropping off the participants from the airport to the hotel and back.

VENUES

- LONDON
- BARCELONA
- KUALA LUMPER
- AMSTERDAM
- ISTANBUL
- SINGAPORE
- PARIS
- DUBAI

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THANK YOU

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