Course Content

Course Description:

This course will provide participants with a foundational understanding of artificial intelligence (AI) and its capabilities. Participants will learn how to identify valuable use cases for AI within their organization, familiarize themselves with common AI models and key terminology, and select appropriate models for their use cases. The course will also cover the AI development and production process, including considering putting models into production and monitoring their performance.

Participants will start with an overview of AI and its history, followed by an introduction to machine learning and deep learning. Throughout the course, real-world examples of AI applications will be presented, and participants will have the opportunity to practice applying their knowledge to a variety of use cases.

Upon completion of the course, participants will have a solid understanding of how AI works, how it can be applied in their organization, and what factors to consider when implementing AI solutions. They will also have a familiarity with common AI models and key terminology, as well as the ability to select appropriate models and monitor their performance once in production.

(This is the final course of the Analytics Bootcamp)

Course Objectives:

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

- Understand the fundamentals of AI and its history
- Identify valuable use cases for AI within their organization (using tools like JIRA & excel)
- Familiarize themselves with common AI models and key terminology
- Select appropriate models for their use cases (Across Azure, AWS and GCP)
- Test and integrate AI models into their systems (Github, locust)
- Consider factors for putting AI models into production
- Establish a framework for monitoring the performance of AI models in production (tools like Valahoi & Databricks)

Prerequisites:

This course is designed for professionals who want to gain a foundational understanding of AI, its capabilities, and its potential impact on their organization. No prior experience with AI is required.

AI Foundations

Target Audience:

The audience for this course is anyone interested in learning about AI and its applications. This includes business leaders, project managers, software developers, data analysts, and anyone interested in learning about AI.

Topics:

Each module will have hands-on activities, real-world examples, and assessments to reinforce learning and ensure understanding.

Module 1: Introduction to AI
- Overview of AI and its history
- Types of AI: Narrow AI, General AI, Super AI
- Current applications of AI in industry and society

Module 2: Machine Learning and Deep Learning
- Introduction to machine learning and deep learning
- Supervised, unsupervised, and reinforcement learning
- Neural networks and deep learning models

Module 3: Identifying Valuable Use Cases for AI
- Understanding what makes a good candidate for AI
- Identifying potential AI use cases within an organization
- Translating examples from other organizations to your own organization

Module 4: Common AI Models and Terminology
- Overview of common AI models and their applications
- Key AI terminology and concepts
- Choosing the right model for your use case(Across Azure, AWS and GCP)

Module 5: Developing and Deploying AI Models
- Understanding the AI development and production process
- Testing and validating AI models (github & Locust)
- Considerations for putting models into Production

Module 6: Monitoring and Maintaining AI Models
- Framework for monitoring performance of AI models once in production (Valahoi & DataBricks)
- Identifying and mitigating model bias
- Ensuring AI models remain up-to-date and relevant
- Each module will have hands-on activities, real-world examples, and assessments to reinforce learning and ensure understanding.

Register for this class by visiting us at:
www.tcworkshop.com or calling us at 800-639-3535