MBPC1011 INTRODUCTION TO AI (2-0-0)

Course Objectives:

The meaning behind common AI terminology, including neural networks, machine learning, deep learning, and data science.

1. What AI realistically can--and cannot—do
2. How to spot opportunities to apply AI to problems in your own organization
3. What it feels like to build machine learning and data science projects
4. How to work with an AI team and build an AI strategy in your company
5. How to navigate ethical and societal discussions surrounding AI

Though this course is largely non-technical, engineers can also take this course to learn the business aspects of AI.

Module-I What is AI?

Introduction, Machine Learning, What is data?The terminology of AI, What makes an AI company?, What machine learning can and cannot do, More examples of what machine learning can and cannot do, Non-technical explanation of deep learning, Non-technical explanation of deep learning.

Module-II Building AI Projects

Introduction, Workflow of a machine learning project, Workflow of a data science project, Every job function needs to learn how to use data, How to choose an AI project (Part 1), How to choose an AI project (Part 2), Working with an AI team, Technical tools for AI teams.

Module-III: Building AI in your Company

Introduction, Case study: Smart speaker, Case study: Self-driving car, Example roles of an AI team AI Transformation Playbook (Part 1), AI Transformation Playbook (Part 2), AI pitfalls to avoid, Taking your first step in AI, Survey of major AI application areas, Survey of major AI techniques

AI & Society

Introduction,A realistic view of AI, Discrimination / Bias, Adversarial attacks on AI, Adverse uses of AI, AI and developing economies, AI and jobs.

Course Outcomes:

CO-1: After completing the course, the students will be able to:
CO-2: Recognize fundamental AI concepts and vocabulary, discerning prominent figures in AI enterprises.
CO-3: Apply project methodologies in machine learning and data science, demonstrating adeptness in selecting and managing AI activities.
CO-4: Analyze deployment of AI solutions, and integrating advanced collaborative technologies for team synergy.
CO-5: Evaluate ethical dimensions of AI, perceptive biases, vulnerabilities, and societal consequences, development ethical awareness.

Reference Course Link

Course Link: https://www.coursera.org/learn/ai-for-everyone