**Title**: Artificial Intelligence Lecture

**Duration:** Half Day (3 hours)

**Pre-requisite:** Basic programming knowledge will be helpful but not required

**Description:**

This lecture will provide a non-intimidating introduction to AI. We’ll discuss the differences between AI and Machine Learning, and we’ll delve into the technology behind AI, including neural networks and Deep Learning. The lecture will discuss how machines learn and why data is so important. We'll talk about building AI projects and walk through a brief demonstration. We’ll also look at some of the amazing things that AI can do, and we’ll discuss how to spot opportunities for AI in your organization.

**Learning Objectives:**

* Understand the differences among AI, Machine Learning, and Deep Learning
* Understand how machines learn
* Understand the importance of data and how to acquire appropriate data
* Understand AI strategy and building AI projects
* Recognizing opportunities for AI
* Understand some of the tools employed in executing AI

**Topic Outline:**

* Introduction to lecture
* AI, Machine Learning and Deep Learning
* How machines learn and the importance of data
* Shallow vs. Deep Neural Networks
* Convolutional Neural Networks and use cases
* Recurrent Neural Networks and use cases
* Demonstration – AI using Google Cloud Platform
* Examples of AI in the real world
* Identifying opportunities for AI in your world
* Next steps

**Structured Activity/Case Studies:**

Demonstration – AI using Google Cloud Platform