## Introduction

This tutorial will ramp up the attendee on the Deep Learning basics, providing sample codes. Components will be laid out for the attendee, with demos and hands on lab.

We will start with general introduction to Deep Learning (DL). We’ll touch all commonly used DL models & discuss the scenarios in which they are used. We’ll discuss concepts like deep re-enforcement learning and transfer learning. We’ll cover multiple case studies and show multiple demos, with hands on labs in azure notebooks and Azure ML Studio.

We’ll deep-dive into CNTK and end with a Q/A session.

##Duration:1 day: 8:30 am – 4:30 pm IST

**TITLE: Demystifying Deep Learning**

**Speakers**: Anusua Trivedi, Sayan Pathak

We break this Deep Learning (DL) tutorial into eight sections –

Section 1: 15 mins – 8:30 am

1. Welcome
2. Introduction

Section 2: 45 mins – 8:45 am

1. Introducing DL
2. Why DL is needed
3. When to apply DL.
4. Main advantages of DL.
5. The main drawbacks of DL
6. How to overcome/optimize these drawbacks

Section 3: 15 mins – 9:30 am

1. DL Frameworks
2. Comparing DL Frameworks

Break: 15 mins – 9:45am

Section 4: 90 mins – 10:00 am (Sayan Pathak from MSR Seattle will deliver this section)

1. Introduction to CNTK
2. Hands on Lab

Lunch – 11:30 pm – 12:30 pm

Section 6: 90 mins – 12:30 pm

1. DL in Azure
2. Case Studies
3. DL in AML Studio
4. Hands on Lab

Break: 15 mins – 2:00 pm

Section 7: 90 mins – 2:15 pm (Sayan Pathak from MSR Seattle will deliver this section)

1. Deep dive into CNTK
2. Hands on Lab

Section 8: 15 mins – 3:45 pm

1. Summary
2. Q/A

A list of pre-requisites is as follows:

1. Git
2. Microsoft Account
3. Account in Azure Notebooks at https://notebooks.azure.com/
4. Azure ML Studio Account