

Artificial Intelligence and Deep Learning

Content developed in association with **Microsoft**

Intended Audience:

All students interested in AI and Deep Learning could attend the workshop. Most portions of the workshop are built ground up and easy to understand.

Audience can expect to take away

- Understand End to End cycle of examples where at Microsoft we start with a business problem and solve it using AI and Deep Learning.
- Understand tips and technique of solving problems using Deep Learning.
- Learn about CNTK and get some hands on experience on Deep Learning.

No pre-work is needed from audience for attending this workshop.

How can students benefit from this workshop?

Artificial Intelligence and Deep Learning are emerging topics of interest in both Academia and Industry. This workshop demystify both these areas, and takes an end to end example of how deep learning can be applied to build a Human-like AI. Workshop should enable students to further apply these concepts in their areas of work.

Format of Workshop:

Day 1

- What is Human-like AI – Brief introduction; motivate concept using examples – 30 minutes
- Deep Learning Fundamentals – 60 minutes
- Our approach to detect Emotions in text – 60 minutes
 - Why Understanding Emotions are important for a Human-like AI and hence why we are trying to solve it.
 - Describe our deep learning approach to detect Emotions in text and results as well learning from same.
- QnA session – 30 minutes

Day 2

- How to make AI answer all topics – 90 minutes
 - Our Deep Learning approach using IR based techniques
 - Challenges and Opportunities in this field, what are the future directions in industry.
- CNTK Hands on Tutorial – 60 minutes
 - Introduction to CNTK
 - Hands on: Building basic CNTK models
- QnA session – 30 minutes