

MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE (UGC - AUTONOMOUS)

Report on One Day Guest Lecture on Machine Learning and Deep Learning 25th January 2019



Submitted by: *Dr. R. Sudhakar, Sr. Assistant Professor, Dept. of CSE*

25-01-2019 - Inaugural Session Starts at 10:10 am

The guest lecture was inaugurated by Dr.Kumar Rajamani, Manager (Technical), Robert Bosch Engineering and Business Solution Ltd, Bangalore followed by lighting of lamp and prayer song.

Opening Remarks by Coordinator of the Program: - Dr R.Sudhakar, Sr.Assistant Professor, CSE Dept stressed on the objective of the guest lecture intended to create awareness on Machine Learning and Deep Learning.

The seminar was conducted in two Sessions.

HoD CSE (Convener of the Seminar) addressed the transformation of the Technology of AI, ML and Deep Learning that combines all the data with cognitive technology to give correct answers.

During the Introductory words, Dr.R.Kalpna, Associate Professor Department of CSE provided the glimpse of the talk "Machine and Deep Learning". She said, 'It is important to study Machine and Deep Learning for those who have the ambition to be at the front in enhancing technologies and theories that explains our reality.'

Speaking on the occasion, Dr.C.Rama Prasada Rao, Dean- IIC conveyed a strong message that the students have to utilise the opportunities provided by the management and the faculty in bringing eminent personalities for lectures and talks which will help them for developing innovative ideas.

Session 1 & 2 (10:30 AM to 2:30 PM)

Resource person: Dr.Kumar Rajamani, Manager(Technical), Robert Bosch Engineering and Business Solutions Ltd, Bangalore.

Dr.Kumar Rajamani introduced the practical applications of Machine and Deep Learning Tools and Technology. He explained about the history of the origin of Artificial Intelligence, Machine learning and Deep Learning.

Example: - Smart machines and applications are steadily becoming a daily phenomenon, helping us to make faster & more accurate decisions and more than 75 percent of businesses investing in Machine and Deep Learning. The role of AI and machine learning is set to increase dramatically over the next five years.

Applications: - One of the most common uses of machine learning is image recognition. There are many situations where you can classify the object as a digital image. For digital images, the measurements describe the outputs of each pixel in the image.

Applications of Machine Learning

- Data mining
- Web click data
- Medical records
- Biology
- Handwritten recognition
- Natural Language Processing(NLP)
- Self-Customizing Programme

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Applications: - Deep learning can be used to use the objects and their context within the photograph to color the image much like a human operator might approach the problem. Generally the approach involves the use of very large convolutional neural networks and supervised layers that recreate the image with the addition of color.

- Colorization of Black and White Images
- Adding Sounds To Silent Movies
- Automatic Machine Translation
- Object Classification in Photographs
- Automatic Handwriting Generation
- Character Text Generation
- Image Caption Generation
- Automatic Game Playing