



Late Shri. Vishnu Waman Thakur Charitable Trust's
VIVA INSTITUTE OF TECHNOLOGY
(Approved by AICTE, New Delhi, DTE, Govt. of Maharashtra and Affiliated to the University of Mumbai)



Computer Engineering Department

Report on ISTE Approved One Week Workshop, on ML-NLP organized by Computer Engineering Department

Machine learning (ML) is a method of data analysis that automates analytical model building. Using algorithms that iteratively learn from data, machine learning allows computers to find hidden insights without being explicitly programmed where to look. Natural language processing (NLP) is a field of computer science, artificial intelligence, and computational linguistics concerned with the interactions between computers and human (natural) languages. Due to the varied applications of these two technologies it is necessary that we appreciate its importance and learn it. So, this course aimed at providing the understanding of the basics of ML and NPL, and working with different tools that facilitate its implementation.

The workshop was organized by the Computer Engineering Department, VIVA Institute of Technology in association with the ML-NLP group of IIT Bombay. All the speakers were provided by the Center for Indian Language Technology, IIT Bombay.

Workshop on ML-NLP

The objective of the ISTE Approved Workshop was

- To familiarize with the basic concepts of ML and NLP
- To help the participants understand the concepts like sentiment analysis, parts of speech tagging, etc.
- To help the participants in implementation of ML and NLP

- To help the participants in working with various tools required for ML and NLP
- For further research in ML and NLP

It was felt necessary that the teaching faculty also become competent in the new technology. With keeping this as an intension the ISTE approved Workshop was conducted from 20th June, to 24th June, 2016 in VIVA Institute of Technology, Computer Engineering Department in association with ML-NLP group of IIT Bombay. The inauguration was attended by Principal Dr. Arun Kumar sir, Dr. Hiresh Luhar (Director VIVA Institute of Manage and Research) and Jaya Saraswati (CFILT lab at Department of Computer Science and Engineering, IITB).

Details of the speakers is as under

Sr. No.	Name of the Speaker	Details of the Speaker	Topics Covered	Date
1	Mr. Aditya Joshi	Ph.D Student at IITB since Jan 2013	NLP Layers; Computation and Linguistics for NLP, Unsupervised approaches ML Toolkits: Mallet, Weka, LibSVM	20 th June 2016
2	Mr. Abhijit Mishra	Ph.D Student at IITB	Supervised approaches; text classification	20 th June 2016
3	Mrs. Jaya Saraswati	Associated with the CFILT lab at Department of Computer Science and Engineering, IITB, since 2001 as a language expert.	Lexical Resources	21 st June 2016
4	Mr. Diptesh Kanojiya	Ph.D. student at the IITB-Monash Research Academy.	Need of Lexical resources, Wordnets, Applications, Challenges Fundamentals, Viterbi,	21 st June 2016

			Applications NLP Toolkits: NLTK, Stanford CoreNLP	
5	Mr. Girish Kumar	PhD student at IIT Bombay, since July 2013,	Noun Compound Handling	21 st June 2016
6	Mr. Anoop Kunchukuttan	Ph.D Student at IITB	Machine Translation MT Toolkits: Moses, Resources, Libraries, etc	22 nd June 2016
7	Mr. Pratik Mehta	Research engineer since July 2015 at the Center for Indian Language Technology, IIT Bombay	Machine Translation	22 nd June 2016
8	Mr. Rajkumar Pujari	Project Research Assistant in CFILT Lab, IIT Bombay	Co-reference Resolution	22 nd June 2016
9	Mr. Shehzaad Dhuliawala	Research engineer at CFILT lab, IIT-Bombay	Information Retrieval	23 rd June 2016
10	Mr. Maulik Vachhani	Mtech student at IITB.	IR Toolkits: Terrier, Lucene	23 rd June 2016
11	Mr. Dharendra Pratap Singh	Research Asst. in computer science and engg. at IIT Bombay	Named Entity Recognition, Multiword Recognition	23 rd June 2016
12	Ms. Raksha Sharma	PhD student in computer science department at IIT Bomaby.	Sentiment Analysis	23 rd June 2016
13	Mr. Kevin Patel	PhD student at IIT Bombay, since July 2014,	Deep Learning	24 th June 2016
14	Ms. Sudha Bhingardive	PhD student at IIT Bombay, since July 2011,	Word sense disambiguation	24 th June 2016

All the speakers were well received by the attendees. The attendees gave very good feedback for to all the speakers. A total of 24 participants participated in the One week workshop.