**IITD Machine Learning-01(chatbot)[INTP23-ML-1]**

**Day 9:**

On day 9, of IITD-AIA FSM internship, I learnt further concept of NLP

**Learning:**

Today, I learnt NLP in more depth concepts which includes LSTM (long short-term memory) RNN and its four-parts : memory cell, forget, input, output gated cell.

I learnt the architecture of LSTM and also its parts like memory cell where information can be added or removed. Then forget cell which comes in handy when context of sentence is important if context of previous and current information is same value given is near to 1 else 0.

And hence, when we do calculations, values become zero and we forget the previous information. In, input cell we have “tan h” where value is between -1 to +1 And current information with value 1 will remain and previous info will become zero.

Also, implemented the practical form through “Keras” and did a small implementation of tokenization, stemming, word2vec in spam detection on supervised data.

**Work Done/learning Implemented:**

Implemented basic LSTM, and word2vec supervised data.

**Is Progress As per Track?**

Yes, I learnt about NP which we will be directly used in data and also, I’m trying to implement the NLP on data.

**Issues Faced Today:** (None)

**Issues Closed Today:** (None)

**Highlights:**

Today, I learnt NLP (LSTM RNN) and implemented them using small dataset(random)

**Concluding the day:**

So today, I learnt new concepts of deep learning and machine learning i.e., LSTM-RNN and their basic implementation.