Proposal to Setup Centre of Excellence on Machine Learning and Big Data at BMSIT&M

Submitted by Dr.Manjunath T N

Machine learning has started to reshape how we live, and it’s time, we understood what it is and why it matters. Machine Learning is the day of the order.

Because of Social Media Big Data is getting generated in 360 degrees surrounding us, so it is useful to many companies to provide answers to many questions that they didn’t even know they had in the first place. In other words, it provides a point of reference. With such a massive amount of information, the data is able to be shaped or tested in any way that the company sees fit. In doing so, organizations are able to pinpoint issues in a more comprehensible form. Collecting masses of data and finding a trend within the data allows the businesses to move much more quickly, smoothly, and efficiently. So the study of Machine Learning and Big Data is very important for the educational institutes in developing the student community industry ready and to work in niche areas.

Even The Government of Karnataka launched the Centre of Excellence for Data Science and Artificial Intelligence (CoE-DS&AI), with NASSCOM recently last November 2017.

### Objectives:

The objectives of the centre include:

* Providing thought leadership and mentoring in Big Data Analytics and Machine Learning to different organizations.
* To provide cutting edge machine learning, artificial intelligence and predictive solutions for some of the most pressing problems of today's data age
* Develop Proof of Concepts in big data analytics and Machine Learning
* Disseminating knowledge through training programmes on new and frontier areas of analytics and Machine Learning
* To carry out projects funded by external agencies

### Centre Coordinators:

1. Dr.Manjunath T N
2. Dr.Pushpa S K

**Research Scholars:**

1. Ashwini N
2. Deepa Yogish
3. Amogh Kulkarni
4. Srihari
5. Puneeth Kumar T P
6. Bhavya

**Few of the Current Projects:**

1. Bio Mimetic
2. PHR(Physical Health Record ) System
3. Agribots using Machine Learning Algorithms
4. Intelligent Answering System
5. Breast Cancer Detection.

**Lab Requirements for High Performance Computing**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sl No** | **System** | **Approx Cost / Unit** | **No of Units** | **Total** |
| 1 | Intel® Xeon® Processor E7-8855 v4 with 14 cores and 128 GB | 6,00,000/- | 1 | 6,00,000/- |
| 2 | Xeon 8 core with 2.2GHz and 64 GB | 3,00,000/- | 4 | 12,00,000/- |
| 3 | Furniture’s with Chair | 5000 | 25 | 75,000/- |
| 4 | Cabling and Accessories | 20,000/- | 1 | 20,000/- |
| **Total** | | | | **18,95,000/-** |