

To  
IITD-AIA Foundation of Smart Manufacturing

Subject : **Weekly Progress Report for Week 0**

Respected sir,

This is my weekly report from 1 june to 4 june that will reflect my progress in the whole week.

What's happening this week:

- Building base for our project
- Deep learning
- Implementation of deep learning

## **My Understanding on DEEP LEARNING**

Deep learning is a type of machine learning that imitates the way the human brain works. It involves training artificial neural networks to learn from large amounts of data to recognize patterns, make predictions, or solve complex problems.

Deep learning uses artificial neural networks, which are composed of interconnected layers of artificial neurons. Each neuron receives inputs, performs calculations, and passes the result to the next layer. These layers are organized in a hierarchical manner, with each layer learning increasingly complex features from the input data.

## **Weekly Progress:**

### **June 01:**

Start learning from a recommended youtube channel about deep learning as a foundation for our projects.

- Introduction to deep learning
- Convolution neural network
- Reinforcement learning

### **June 02:**

Continue the learning process on deep learning.

- Deep learning new frontier
- Text to image generation
- Modern era of statistics
- Future of robot learning

### **June 03:**

- Learned about various libraries such as Numpy , pandas, matplotlib etc in greater detail.
- Learn about their use
- AI for Science

### **June 04:**

- Implementation of code for deep learning.
- Faced problems while implementing
- Tried to overcome it by using various resources available on google and youtube.