

**Name of The Project: CIFAR-10**

**Name of the team:M Hasanuzzaman**

# Participants:

1) Hasanuzzaman

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ID: 1640CSE00536

**Kaggle account:** <https://www.kaggle.com/hzm401>

**Git Repository for the source code:**

<https://github.com/hzm401/CIFAR-10>

**Problem statement:** CIFAR-10 - Object Recognition in Images.

# Description

The CIFAR-10 dataset is a collection of images that are commonly used to train computer vision algorithms. It is one of the most widely used datasets for deep learning research. The CIFAR-10 dataset contains 60,000 32x32 color images in 10 different classes which are airplanes, cars, birds, cats, deer, dogs, frogs, horses, ships and trucks.

## **Technical Approach:**

### **Preprocessing Techniques**

- 1) Mean subtraction
- 2) Normalization
- 3) Dimensionality reduction
- 4) Regularization

**Algorithm:**k-means algorithm

**Learning Techniques**

1)Convolutional Neural Networks

2)Max-Pooling

**Development Platform:**Deep

Convolutional Neural Network

**Libraries:**

1)Open CV

2)Keras

3) Numpy

4) Python

5) Tensorflow

6) Pip etc.

**Total Submission: 5**

<b>baseline_sub.csv</b> 9 days ago by <a href="#">M Hasanuzzaman</a> <a href="#">add submission details</a>	0.81600	0.81600	<input type="checkbox"/>
<b>baseline_sub.csv</b> 10 days ago by <a href="#">M Hasanuzzaman</a> 4th Submission	0.81080	0.81080	<input type="checkbox"/>
<b>baseline_sub.csv</b> 10 days ago by <a href="#">M Hasanuzzaman</a> 3rd Submission	0.80450	0.80450	<input type="checkbox"/>
<b>baseline_sub.csv</b> 11 days ago by <a href="#">M Hasanuzzaman</a> 2nd Submission	0.80320	0.80320	<input type="checkbox"/>
<b>baseline_sub.csv</b> 11 days ago by <a href="#">M Hasanuzzaman</a> <a href="#">add submission details</a>	0.63249	0.63249	<input type="checkbox"/>

**Best Accuracy: 0.81600**