National Institute of Technology Karnataka, Surathkal
Indian Society For Technical Education
NITK Chapter

ISTE CRYPT DL SGP 2021

Week 1 Assignment

Problem Statement:

You are given two separate datasets -

1) For training the MLP model

    A training set consisting of images labeled as cat or not-cat.

2) For testing the MLP model

    A test set consisting of images labeled as cat or not-cat.

Every image in both these datasets exists as a NumPy array of shapes (px, py, 3) (where 3 is the number of channels - RCB).

You have to build a simple image recognition, logistic regression model that can correctly classify pictures as cat or non-cat.

We have provided a link to the drive folder, which contains datasets, a helper function to load the dataset, and the main .ipynb file(the notebook). You can either copy this folder to your drive and directly proceed using Google Colab, or download the folder and run the notebook in Jupyter Notebook.

https://drive.google.com/drive/folders/1kEQYQZTHlEj8tf7qCIcNNpHqsORF8mpQ?usp=sharing

Dw, you don't have to make the entire model on your own. We have made the task easy for you and did most of the work. Your task is to complete important functions like initializing parameters, forward and backward propagation, optimization, merging all functions into the model.

Basically, where ever you see "Exercise" or `### START CODE HERE ### (≈ x line of code)` you need to add approx those many lines of code.