LOGO INFRINGEMENT DETECTION BY USING CNN

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***Abstract*: Logo Infringement is mainly used for Logo Detection that means to check whether the logo is fake or original so we have to done this project by using CNN;the technologies are implemented in this project are Tensorflow and Keras these are most important technologies are implemented in this project.firstly we have to upload dataset of Logo after uploading the dataset we have to done Logo classification then we have to know whether the logo is fake or original.**

INTRODUCTION

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Logo Infringement Detection is used to identify the fake logo can be matching and recognized by original logo here every image that means Logo is divided into the rows and columns in this each cell can be represented as a pixels so the one image cell can be compared with the another image cell here the cell can be compared with the original logo then it compared with the every original logo if it original logo keeps it with as original logo other wise it can be treated as fake.

By using CNN algorithms we developed this project,the processing of the project first to upload a dataset that dataset have both fake and original logos while uploading the dataset we can observe the path of the file after uploading the dataset we have to done preprocessing,preprocessing means it tells the percentage of the test images and train images we actually have twenty percent of the train images and eighty percent of the test images after completing of the preprocessing to train the CNN algorithm based on that algorithm to display the CNN lost and gain percentage after completing of the training of the graph to classify the particular data,classification means to upload the any logo present in the dataset that display uploading logo is a fake or original.

original fake

LITERATURE SURVEY

In Logo Infringement Detection we working with the conditions are like pattern of use , types of pictures ,semantics and the sensory gab,in this

image or logo can be stored by color,texture and geometry.We also consider the similarity of the in image retrieval also consider the shape of the images ,signs this have interaction between the images

the ideas behind this project are developed by the some different types of techniques and systems.We also involved challenges in this project also discuss the swapping of the subfields and also many new people can involved here challenges are based on the technologies.

In this project we can search for the images,while searching of the images we can search fake images and also original images and also to provide the best algorithms for group of images and idea behind this by using this retrieval of images we can verify the classification of the logos.

System Analysis

This Logo detection Accuracy of Existing system is low and the accuracy of the proposed system is high.In system analysis consists of steps that are present in the below.

steps involved in this project are

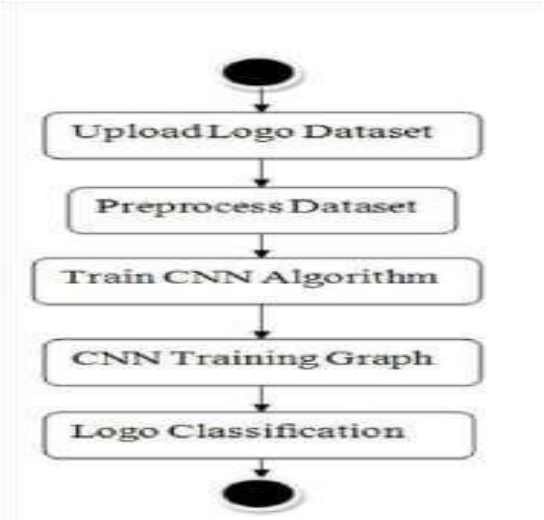
Upload Logo Dataset Preprocess Dataset

Train CNN Algorithm

CNN Training Graph

Logo classification

Flowchart



UPLOAD LOGO DATASET

Attributes are present in this Dataset are fake and original.After uploading the dataset it can display original and fake attributes and also it can display the path of the file. **preprocess**

Dataset

Preprocessing means to preparethe raw data. That raw data can be accept the network after preprocessing,the dataset can display test and train of images.In the form of percentages . It contains 80% of images are train images and

20% ofthe images are test images

Train CNN Algorithm

Training CNN Algorithm means to train the dataset.This dataset have fake and original logo. After training of CNN Algorithm itshows how many fake and original logos are there.

CNN Training Graph

It can shows the accuracy of the dataset. Accuracy means quality,it shows loss and gain of the dataset.

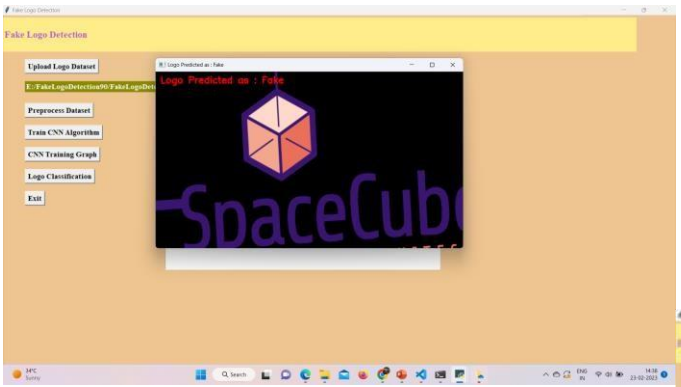
Logo Classification

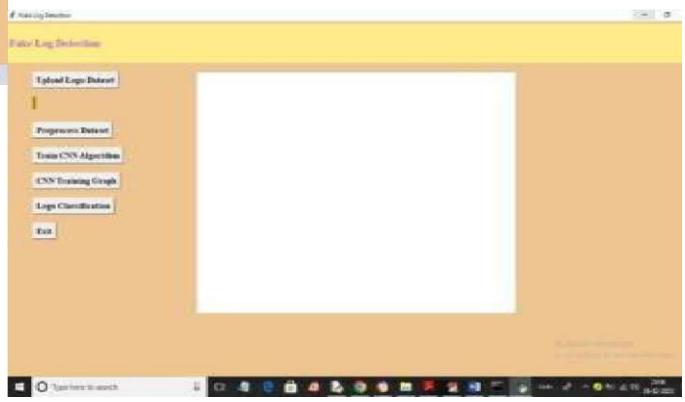
Logo classification classifies the logos and display whether the logo is fake or not ,these logos are taken from the dataset.

Results

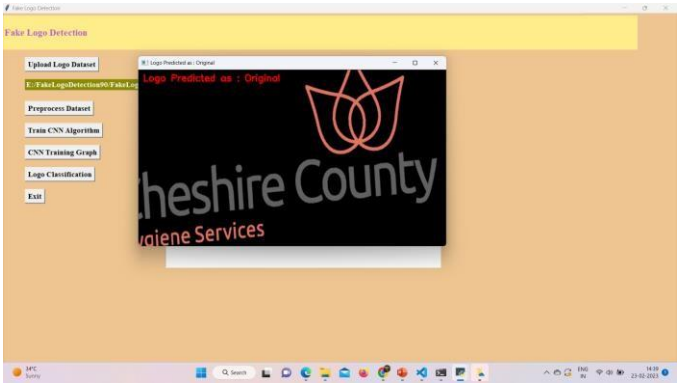
Upload Logo Dataset

Fake Logo





Original Logo



Conclusion

With logo detection, it's easier prevent fraud logos and keep a specific brand safe from counterfeit attempts.

Adding this tool to a company's protection strategy can help find fraudulent or harmful content on any online platform this Logo Detection app aims to help consumers.

Referances

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