Literature Survey

Team No :05

Team ID :PNT2022TMID07922

College Name :Adhiyamaan College of Engineering(Autonomous)

Department :Computer Science And Engineering

Team Leader :Akshaya R

Team Member : Asif M S

Team Member : Harikarasudhan K

Team Member : Harini T D

Team Member : Imthiyas F

S.No	TITLE	PROPOSED WORK	TOOLS USED/ ALGORITHM	TECHNOLOGY	ADVANTAGES/ DISADVANTAGES
1	Indian Food Image Classification with Transfer Learning	In this paper image classification is performed on Indian food dataset using different transfer learning techniques.	• CNN • Convulutional Modeling • Google Inception v3 Model	• Deep Learning • artificial intelligence. • Transfer Learning	In experimentation it was found that Google InceptionV3 outperformed other models with an accuracy of 87.9% and loss rate of 0.5893.
2	Food Recognition and Calorie Measurement using Image Processing and Convolutional Neural Network	In this paper we propose a calorie measurement system whereby the user is made to upload the image of food item and as a result, number of calories present in the uploaded food image will be predicted.	• CNN • ReLU • Adam Optimizer • Softmax	• Deep Learning	In experimental results on food recognition showed 78.7% testing accuracy with 93.29% training accuracy

S.NO	TITLE	PROPOSED WORK	TOOLS USED/ ALGORITHM	TECHNOLOGY	ADVANTAGES/ DISADVANTAGES
3	A deep convolutional neural network for food detection and recognition	The objective of the inception module is to act like a multistage function extractor by using 1×1, 3×3, and 5×5 convolutions inside a single module of the network, then the result of this module is fed as input to the next layer within the network.	• Feature extraction • CNN	• Deep Learning • Artificial Intelligence	For the process of food detection, CNN also exhibited considerably higher accuracy than other conventional methods.
4	Transfer Learning: Inception-V3 Based Custom Classification Approach For Food Images	In this paper, the Google Inception-V3 model is considered as a base, in top of that fully connected layer is built to optimize the classification process.	• CNN • Inception Model • Calories Estimation	• Deep Learning • Transfer Learning	Our proposed model is ableto provide us calories estimation, ingredient, and as well as,correctly able to differentiate between properly baked, less baked, and over baked food images

S.No	TITLE	PROPOSED WORK	TOOLS USED/ ALGORITHM	TECHNOLOGY	ADVANTAGES/ DISADVANTAGES
5	Calorie Estimation from Fast Food Images Using Support Vector Machine	Proposed a model which focused on estimation of number of calories in the food item by just taking its image as input using SVM.	• SVM • Histogram of Oriented Gradients Features.	• Machine Learning	The model proposed can be used to identify food in the image but it cannot predict hidden ingredients and pieces of food.
6	A Comparative Study of Indian Food Image Classification Using K-Nearest-Neighbour and SupportVector-Machines	The proposed food recognition system is developed in such a way that it can classify the Indian food items based on two different classification models i.e., SVM and KNN.	• KNN • SVM • Edge Based, Region Based Approaches	• Machine Learning	The proposed system can be evaluated with other classification models and can be combined with data mining to recommend the food to the user.

THANK YOU