Title

CLASSIFICATION OF GROCERY ITEM IMAGE USING CONVOLUTIONAL NEURAL NETWORK

Author

Aditya Pravin Walke
awalke@buffalo.edu (50205384)

Sunil Kunjappan Vasu
sunilkun@buffalo.edu (50205673)

Type of Task & Task description

Classification

The main objective is classification of grocery item images into different category. With the recent advances in technology like “Just Walk Out” proposed by Amazon Go, it has become a highly desired requirement to make the checkout process easier by avoiding to wait in long queues. By identifying the grocery items and keeping a real time track of the items in cart helps to achieve this.

Dataset

The Freiburg Groceries Dataset

Dataset consisting of 5,000 images in 25 classes of groceries.

Machine learning method

Convolution Neural Network
Using TensorFlow

Performance Measures

Accuracy of Classification
Top 5 and Top 10

Expected Results

We expected to achieve an accuracy of >75%