

SYNOPSIS

DISTRIBUTED ANALYTICS IN FOG COMPUTING PLATFORMS USING TENSORFLOW AND KUBERNETES

KEY WORDS: Edge Analytics , Docker , Kubernetes , Tensorflow , YOLO , Containerisation , Orchestration, OpenFaaS.

In this project an edge analytics platform which is capable of handling the streaming data for analytics is setup to analyse the facial data. The platform is created using Docker and Kubernetes along with Tensorflow. Docker is used as a containerisation tool and the Docker hub is used as a remote repository for pulling and pushing the code to build the Docker images.

These docker images are build for Tensorflow application which has the computational libraries for python. The Tensorflow application is hosted on the Kubernetes cluster which captures the data from the worker node and does classification and localisation of the data captured.

In this project I have written the configuration files and yaml files for the lighter weight version of the edge cluster. The yaml files are written specific to the YOLO application that is deployed in the cluster.I have maintained the github repository for this project.

By the end of this project, I'm good with the creation of configuration and yaml files for any application.

