

CS5542 Big Data Analytics and App

LAB ASSIGNMENT #9

1.TensorFlow Programming: Write a TensorFlow program for the following Task.

- Implement a CNN model for image classification for the datasets that you consider relevant to your project.
- Report accuracy and time to build the CNN model.
- Visualizations (Tensor Board): training, loss, weights etc.

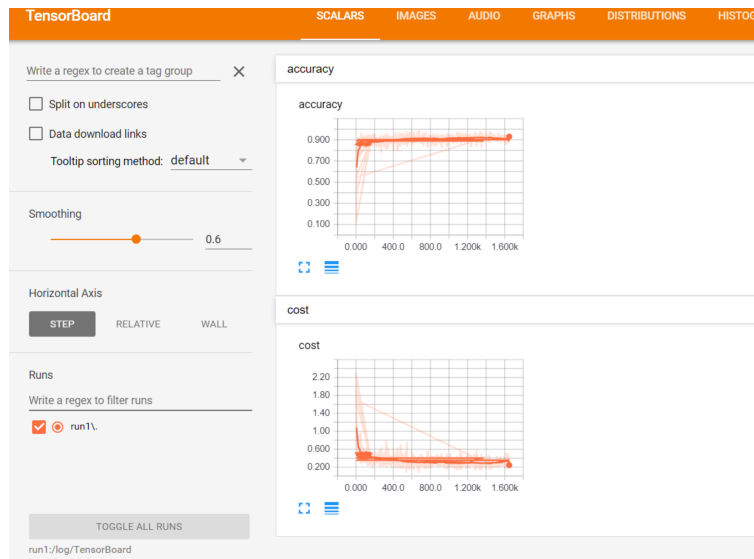
Description of the dataset: *in this lab, I use the data set of Deaths in 122 U.S. cities, it contains the complete set of data reported to 122 Cities Mortality Reporting System. The system was retired as of 10/6/2016. While the system was running each week, the vital statistics offices of 122 cities across the United States reported the total number of death certificates processed and the number of those for which pneumonia or influenza was listed as the underlying or contributing cause of death by age group (Under 28 days, 28 days - 1 year, 1-14 years, 15-24 years, 25-44 years, 45-64 years, 65-74 years, 75-84 years, and - 85 years). the result shows below:*

```
Instructions for updating:  
Use `tf.global_variables_initializer` instead.  
Epoch: 0  
Accuracy: 0.9173  
Done
```

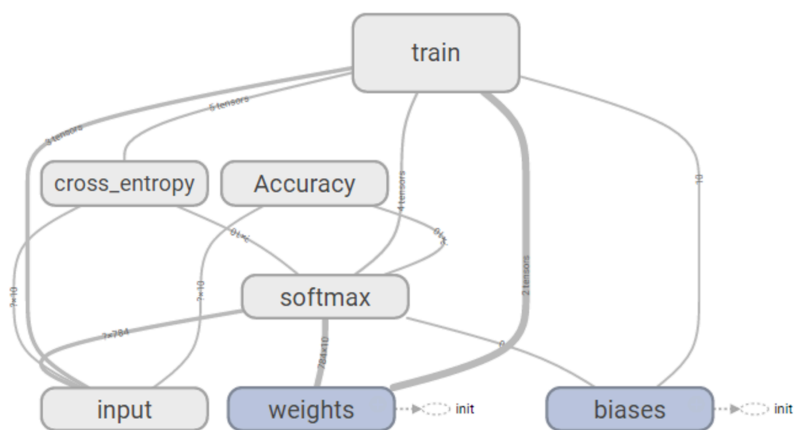
```
Process finished with exit code 0
```

```
Step 200, Training Accuracy 0.56  
Step 300, Training Accuracy 0.94  
Step 400, Training Accuracy 0.26  
Test Accuracy 0.9623  
Time for building CNN:  
56482
```

```
Process finished with exit code 0
```

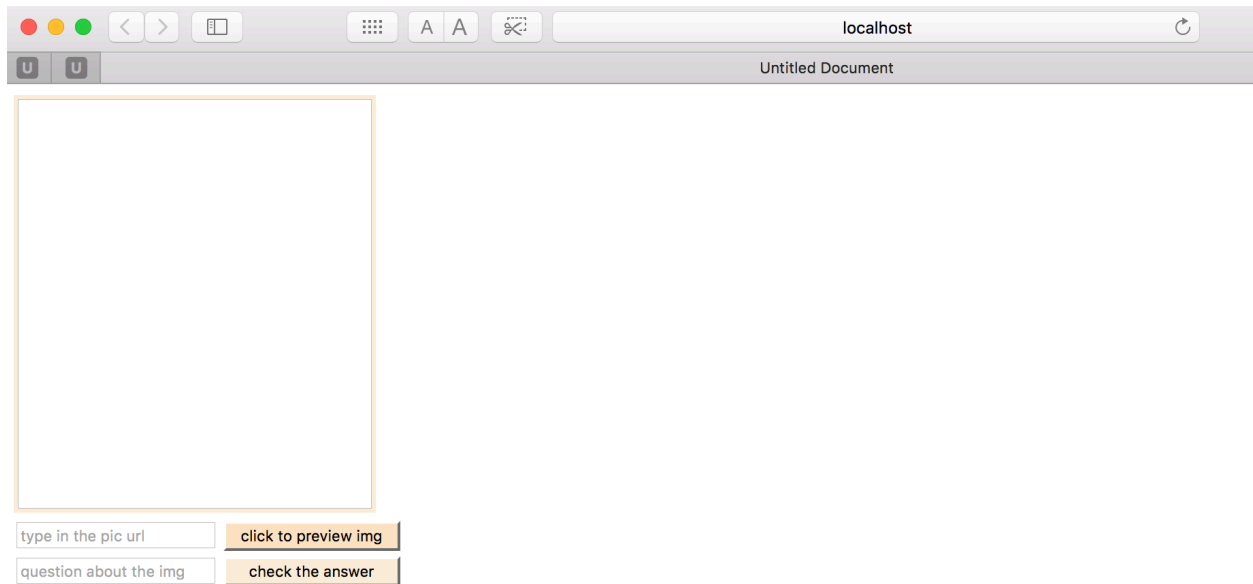


Main Graph



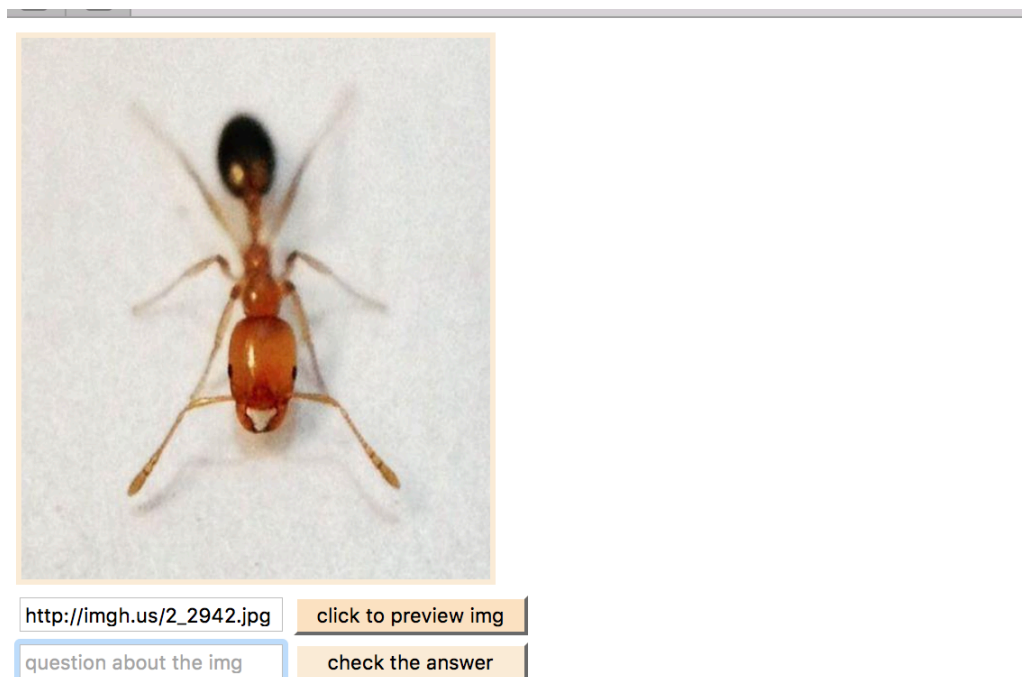
2. Develop a Web-based Application for Visual Question Answering that is relevant to your own project including the following features:

- a. Google Conversation API
- b. Question answering for images
- c. Connect it to Clarifai API or Spark API



The screenshot shows a web browser window with the address bar set to 'localhost'. The page title is 'Untitled Document'. The main content area features a large, empty rectangular box with a thin orange border, intended for displaying an image. Below this box are four input fields and two buttons arranged in two rows. The first row contains a text input field labeled 'type in the pic url' and an orange button labeled 'click to preview img'. The second row contains a text input field labeled 'question about the img' and an orange button labeled 'check the answer'.

the answer is :



This screenshot shows the same web application interface, but with an image of an ant displayed in the placeholder box. The input fields and buttons are populated with the following data:

- The 'type in the pic url' field contains the URL: http://img.h.us/2_2942.jpg
- The 'question about the img' field is empty.
- The 'click to preview img' button is highlighted in orange.
- The 'check the answer' button is highlighted in orange.

the answer is :

<

>

A

A


localhost

U

U

Untitled Document

Untitled Document



http://img.h.us/2_2942.jpg

click to preview img

topic of the picture

check the answer

the answer is : this picture is talking about ants