

AI Project #4: Image Classifier

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Due Date:

March 5, 2018 23:59 hours

<https://codelabs.developers.google.com/codelabs/tensorflow-for-poets/>

Implement

Implement the “TensorFlow for Poets” guide by following the steps of the training guide with the following modifications:

REQUIREMENTS:

1. Use the inception architecture
2. Do not restrict the training steps or specify additional training steps (Use the tensorflow default only)
3. Download domestic rabbits training images instead of flowers: <http://c322.wirsz.com/1/8rabbits.zip>
4. Train the model, find 3 rabbit pictures and 1 “unknown” picture on the Internet and analyze them (suggestion: look for images of those 8 rabbit breeds but do not use pictures from the training set)
5. Figure out how make the system return a certain percentage for “unknown” when given images that don’t fall into the 8 rabbit categories (see screenshots for examples)
6. Tweak the settings to achieve better numbers for the rabbit pictures. Increasing the number of training steps or downloading/removing training images are **NOT** valid options. Tell me what you did and provide screenshots from analyzing your same 4 pictures

Submit the 3 rabbit pictures you chose, a short document describing the Python commands you used for training/analysis and how you overcame the challenges in this assignment, and multiple screenshots of the statistics (at steps #4, #5, and #6)

Last Revised: February 21, 2018