

000 ECE471, Selecte Topics in Machine Learning – Assignment 4

001 Submit by Oct. 2, 10PM

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003 tldr: Classify CIFAR10. Achieve performance similar to the state of the art. Classify  
004 CIFAR100. Achieve a top-5 accuracy of 80%.

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008 **Problem Statement** Consider the CIFAR10 and CIFAR100 datasets which contain  
009  $32 \times 32$  pixel color images. Train a classifier for each of these with performance  
010 similar to the state of the art (for CIFAR10. It is your task to figure out what is state  
011 of the art. Feel free to adapt any techniques from papers you read. I encourage you  
012 to experiment with normalization techniques and optimization algorithms in this  
013 assignment. Write a paragraph or two summarizing your experiments. Hopefully  
014 you'll be able to reuse your MNIST program.

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