

# Neural Networks Midterm Project

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## 1 Introduction

In this paper we set out to improve on the generic CIFAR-10 code available at [https://github.com/keras-team/keras/blob/master/examples/cifar10\\_cnn.py](https://github.com/keras-team/keras/blob/master/examples/cifar10_cnn.py). However, instead of testing an improved model on the CIFAR-10 dataset, we set out to test the data on the CIFAR-100 dataset. Currently, the best model for analyzing the CIFAR-100 dataset achieves an accuracy of about 84%. While in setting out on this project we didn't expect to even approach this accuracy, we were surprised to find just how well the CIFAR-10 model worked for analyzing the CIFAR-100 data. Starting from a baseline accuracy of about 38%, we have made several improvements to the model including {insert blurb here}, that have drastically improved accuracy.

## 2 Related Work

## 3 Approach

## 4 Results

## 5 Conclusion