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Convolution Neural Networks for Visual Recognition

There are many reasons why neural networks can assist us in solving many different types of problems. They can learn through training and random changes, ultimately improving with each new generation. In order to train a neural network, there are numerous aspects to consider—many of which were discussed in Stanford’s Computer Science 231n class. They went into significant detail about each step of training a neural network. To begin, they discussed gradient checking and how you must decay the learning over time using the gradient as a reference. Then, you have to monitor the loss and validity accuracy to make sure you are not overfitting your model. After that, you must find good hyperparameters with a random search—starting with a wide range and narrowing it down as time goes along. Finally, you can form an ensemble of models for optimization and improved performance.