

Summary of *Deep learning* by Yann LeCun, Yoshua Bengio, and Geoffrey Hinton

The review by LeCun et al. provides a brief overview of deep learning. At the most general level, deep learning seeks to separate inputs for a given system to recognize individuals in various forms in order to make traditional methods (ie. Single layer nets and/or linear models) more robust. Two specific examples are given—convolutional- (CNN) and recurrent- neural nets (RNN). Although each of these systems are good in their own right, they are better suited to tackle specific issues. CNNs are mainly used for image processing while RNN is used for language/pattern processing. The common theme among these neural nets is the overall goal to minimize the objective function by tuning weights.