



Contribution ID: 104

Type: **Lecture**

## Machine Learning L3: Convolutional Neural Networks

*Thursday 27 August 2020 11:15 (1 hour)*

This lecture introduces the method of using Convolutional Neural Networks (CNNs) for image based classification. The lecture gives an overview of examples of popular CNN architectures and describes the functionality of each layer within a CNN. It uses the example of binary cross entropy to introduce the concept of a cost function and explains how this is optimised using a gradient descent algorithm and the principle of back-propagation. The lecture concludes by giving an example of how a particular CNN architecture can be implemented in Python.

### Summary

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