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Machine Learning with Python-From Linear Models to Deep Learning

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2. Objectives

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Introduction to Feedforward Neural Networks

At the end of this lecture, you will be able to

- Recognize different **layers** in a **feedforward neural network** and the number of **units**
- Write down common **activation functions** such as the hyperbolic tangent function **tanh** and the **linear function (ReLU)** .
- Compute the output of a simple neural network possibly with **hidden layers** given the **activation functions** .
- Determine whether data after transformation by some layers is linearly separable, draw the decision boundary and use them to help understand the behavior of the network.

Discussion

Topic: Unit 3. Neural networks (2.5 weeks):Lecture 8. Introduction to Feedforward Neural Networks / 2. Objectives

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[Supplementary Notes on Shallow Neural Networks](#)

Completely optional, as usual.[See here for file.](https://drive.google.com/file/d/1rHc81Fy3dzDnQQ1ByCnV17...

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