COMP9444 Neural Networks and Deep Learning

Quiz 1 (Perceptron Learning and Backpropagation)

This is an optional quiz to test whether you understand the material from Weeks 1 and 2 of the course.

- 1. What class of functions can be learned by a Perceptron?
- 2. Explain the difference between Perceptron Learning and Backpropagation.
- 3. When training a Neural Network by Backpropagation, what happens if the Learning Rate is too low? What happens if it is too high?
- 4. Explain why rescaling of inputs is sometimes necessary for Neural Networks.
- 5. What is the difference between Online Learning, Batch Learning, Mini-Batch Learning and Experience Replay? Which of these methods are referred to as "Stochastic Gradient Descent"?

Make sure you try answering the Questions yourself, before checking the Sample Answers