## Deep Learning

## Theoretical Exercises – Week 8 – Chapter 7

Exercises on the book "Deep Learning" written by Ian Goodfellow, Yoshua Bengio, and Aaron Courville. Exercises and solutions by T. Méndez and G. Schuster

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## 1 Exercises on Regularization for Deep Learning

- 1. What is the goal of regularization?
- 2. Describe the following regularization methods in your own words, by explaining the idea behind the method and describing, how it acts as a regularizer.
  - (a) Weight decay
  - (b) Dataset Augmentation
  - (c) Noise Robustness