

## **A6: Artificial Neural Networks**

This course presents a theoretical and practical view of artificial neural networks. The course presents first the foundations of artificial neural networks and different types of architectures (both shallow and deep networks). Then, the course presents learning techniques to train neural networks, with special attention to deep learning methods. The course also presents neural models (e.g., convolutional neural networks) for problem classes and application domains (e.g, artificial vision, robotics, etc.). To complement the practical view, the student will use specialized software tools to train neural networks in practical problems.