e-ITEC Specialized Programme on Deep Learning

Foundational concept of neural networks and deep learning, Recurrent Neural Networks, Natural Language Processing & Word Embeddings

Sequence Models & Attention Mechanism Transformer Network

Improving Deep Neural Networks: Hyperparameter Tuning, regularization and Optimization Practical Aspects of Deep Learning, Optimization Algorithms

Hyperparameter Tuning, Batch Normalization and Programming Frameworks

Structuring Machine Learning Projects ML production workflow, time-saving error analysis procedures

Conventional Neural Networks, Foundations of Convolutional Neural Networks Deep Convolutional Models : Case Studies

Object Detection, Special Applications: Face recognition & Neural Style Transfer

Deep learning in Economic and Finance, Use of Deep learning in Economic and Finance for prediction and classification: time series analysis, image satellites, internet searches... Sentiment Analysis use cases in public administration: Sentiment classification, Dictionary based sentiment analysis, Aspect based sentiment analysis, Deep learning based sentiment classification

Web scraping, big data streaming download, storage and analysis with spark and Hadoop: Real use cases in Economic and Finance...

Presentation of the various experiences already carried out in the field of public finance around the world, in terms of the implementation of deep learning systems. Use case among the experiences presented.