

Title of the course	Diving deep into Deep Learning
Certification	Approved Deep learning certificate from Genuvers center
Hourly volume	8 H
Materials needed	Laptop
Summary	This training session introduces the propaedeutics of deep learning, including learning algorithms, especially Convolutional Neural Networks and Recurrent Neural networks, hyperparameters, verification sets, parameter estimation, and estimation methods. Then, it explains the different modern algorithm of CNN and RNN types, and development of neural networks as well as perceptron and its training rules.



Boudour Ammar is an assistant professor in the Department of Computer Engineering and Applied Mathematics at the National School of Engineers of Sfax (ENIS). Vice Chair of the IEEE International Association for Tunisian Chapter Computational Intelligence (CIS) 2021-2022. She is a professor at the Master of Research in embedded systems, at the National School of Engineers of Sfax (ENIS) in cooperation with the University of Chemnitz, Germany (2012 - 2018). She was the head of the Career Center and Certification Skills 4C-ENIS in 2018-2019 and she organizes events like: ENIS industrial forum, Robocomp, WRO (World Robot Olympiad) robotics competitions.

Research member at the REGIM laboratory and involved in the supervision of masters and PhD theses. Research interests include the areas of iBrain (artificial neural networks, machine learning, recurrent neural network), IoT applications in agriculture and e-health (autonomous robots, intelligent control, embedded systems, medical applications, EEG and ECG signals).

Training Program

Each session will last 2 hours:

- **Session 1**
Basics of Convolutional Neural Networks
- **Session 2**
Modern Convolutional Neural Networks
- **Session 3**
Basics of Recurrent Neural networks
- **Session 4**
-Modern Recurrent Neural networks