

# Artificial Intelligence

This training introduces several fundamental concepts and methods for machine learning. The objective is to familiarize the audience with some basic learning algorithms and techniques and their applications, as well as general questions related to analyzing and handling large data sets. Several software libraries and data sets publicly available will be used to illustrate the application of these algorithms. The emphasis will be thus on machine learning algorithms and applications, with some broad explanation of the underlying principles.



## Level 1 (9 hours)

Participants will be able to:

- Understand all the feature selection and ranking
- Recognize neural networks for image classification
- Implement hyper parameters fine tuning.

**Cost:** 600 000 L.L. or 300\$

**Dates:** February 10, 12 & 15, 2021  
From 5:00 pm to 8:00 pm

## Level 2 (9 hours)

Participants will be able to:

- Implement Decision Tree and Random Forest for credit card fraud detection
- Understand Recurrent Neural Network for machine translation
- Learn about Neural Network for text analysis and sentiment analysis

**Cost:** 600 000 L.L. or 300\$

**Dates:** February 24, 26 & March, 1, 2021  
From 5:00 pm to 8:00pm

## Level 3 (9 hours)

Participants will be able to:

- Understand Reinforcement learning for game playing.
- Implement Image Segmentation
- Comprehend Self-Driving Car Localization with Hidden Markov Models

**Cost:** 600 000 L.L. or 300\$

**Dates:** March 10, 12 & 15, 2021  
From 5:00 pm to 8:00 pm



Dr. George E. Sakr received the BE degree (with distinction) in electrical and electronics engineering from Lebanese University, Roumieh, in 2005, the MS degree in networking and telecommunications from the joint program between the Lebanese University and St. Joseph University of Beirut in 2007 and the PhD degree in Machine Learning from the American University of Beirut in 2011. Between 2011 and 2015 George was a Lecturer at AUB and the Lebanese American University as well as a post-doctoral fellow at the Medical Center of the American University of Beirut where he worked on applying machine learning for precision medicine. Since 2015, George has been an assistant professor at St Joseph University of Beirut. His research interests include artificial intelligence, machine learning, human machine interfacing, and application of machine learning for precision medicine. He is a member of the IEEE since 2008. He has more than 20 journal and conference publications in the domain of machine learning and heart healthcare. Expert at the Professional Training Center (CFP) of Université Saint Joseph de Beyrouth.

**A certificate of attendance will be given to those who purchase only one level**

**A certificate in Artificial Intelligence will be granted to those who purchase the whole program (3 levels)**

**A special discount for purchasing the whole program (20%)**

**For corporate & organizations, after sending three participants to the program, the 4<sup>th</sup> one will be for free.**

**Zoom platform**

**Register here: <https://enquetes.usj.edu.lb/index.php/83275?newtest=Y&lang=en>**