Introduction to Artificial Neural Networks

Workshop Overview

This workshop introduces you to the basic concepts of artificial neural networks, specifically shallow multilayer networks and some of their applications. The topics covered include: perceptrons, multilayer networks, backpropagation and applications such as visual object recognition.

Learning Outcomes

- To learn the structure of artificial neural networks
- To learn training algorithms of artificial neural networks
- To be introduced to different applications of artificial neural networks
- To write Matlab code to train and test artificial neural networks on various problems

Prerequisites

You should have a good mathematical background, mainly in Linear Algebra and Multivariable Calculus, to apply it in understanding the theory and developing the algorithms of the presented optimization methods.

Also, a basic knowledge of programming logic is a must. Having previous experience in MATLAB is recommended.

Presenters

Yara Rizk (yar01@mail.aub.edu)

Hardware/software setup

We will have the session in a lab equipped with MATLAB. You do not need to bring anything with you to the workshop.

Location, Time & Date

IOEC 418 ECE Control lab, Wednesday **March 23th** at **5pm**.

Registration

Kindly fill this form, and we will confirm your place by email. For any questions or inquiries email us at club@aubrobotics.com. More info is available on our website aubrobotics.com