



Course Title:

Deep Learning with MATLAB

Course Purpose:

This two-day course provides a comprehensive introduction to practical deep learning using MATLAB®. Attendees will learn how to create, train, and evaluate different kinds of deep neural networks.

Topics include:

- Importing image and sequence data
- Using convolutional neural networks for image classification, regression, and other image applications
- Using long short-term memory networks for sequence classification and forecasting
- Modifying common network architectures to solve custom problems
- Improving the performance of a network by modifying training options

Pre- requisites:

MATLAB Fundamentals



- ✓ 2 training days
- ✓ Hours: 09:00-17:00
- ✓ Total training hours: 16

Teaching method

The course combines lectures, demonstrations and a lot of practical exercises in MATLAB. The course is in Hebrew, but the training materials are in English.

עמוד מס' 1

Training Center Systematics - Contact information:

Phone number: 03-7660111 Ext: 6 **Email:** training@systematics.co.il

Website: <http://www.systematics.co.il/mathworks>



Course syllabus

Day 1:

- ✓ Transfer Learning for Image Classification (2.5 hrs)
- ✓ Interpreting Network Behavior (1.5 hrs)
- ✓ Creating Networks (2.0 hrs)
- ✓ Training a Network (1.0 hrs)

Day 2:

- ✓ Improving Network Performance (2.0 hrs)
- ✓ Performing Image Regression (1.0 hrs)
- ✓ Using Deep Learning for Computer Vision (1.0 hrs)
- ✓ Classifying Sequence Data (2.0 hrs)
- ✓ Generating Sequences of Output (1.0 hrs)

עמוד מס' 2

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