The Hebrew University of Jerusalem

Syllabus

Introduction to Deep Learning - 67822

Last update 11-09-2023

__HU Credits:__ 4

__Degree/Cycle:__ 1st degree (Bachelor)

__Responsible Department:__ Computer Sciences

__Academic year:__ 0

__Semester:__ 2nd Semester

__Teaching Languages:__ English and Hebrew

__Campus:__ E. Safra

__Course/Module Coordinator:__ Raananm Fattal

__Coordinator Email:__ raanan.fattal@mail.huji.ac.il

__Coordinator Office Hours:__ After class

__Teaching Staff:__

Prof. Raanan Fattal,
Mr. shahar edelman

Course/Module description:
  The course will describe various common network architectures and tools for applying them in different fields of CS

Course/Module aims:
  Getting to know deep-learning tools and implementing them.

Learning outcomes - On successful completion of this module, students should be able to:
  Understand these tools and being able to apply them in practice.

Attendance requirements(%):
  0

Teaching arrangement and method of instruction: Lecture

Course/Module Content:
  Different layers of current neural networks, RNNs, CNNs, GANs, AEs, Diffusion, Attention, classifiers, optimisation, and some theoretical insights as to the functional spaces they span.

Required Reading:
 Will be given in the Moodle

 Additional Reading Material:

 Grading Scheme:
  Written / Oral / Practical Exam 60 %
  Submission assignments during the semester: Exercises / Essays / Audits / Reports / Forum / Simulation / others 40 %

Additional information:
  Prerequisite courses:
Intro. to Prob. and Stat. (80430), or Into. to Machine Learning (67577)