Name of the course: Introduction to deep learning

Teachers: Francesco Bellotti; e-mail: francesco.bellotti@unige.it

Duration of the course: 20 hours

Language: English.

Aims of the course: the goal of the course is to introduce the main topics (particularly: architectures and training strategies) of machine learning with deep neural networks, in an application-oriented approach.

Teaching program:

- 1. Multilayer perceptron
- 2. Convolutional neural networks
- 3. Object detection
- 4. Recurrent neural networks
- 5. Attention
- 6. Transformers
- 7. Autoencoders
- 8. GANs

Exam modality: Presentation of a project where the student exploits the techniques and the concepts learned during the course

Bibliography: Notes by the teacher (in English)

Timetable:

- July 19, 9-13, room A2
- July 22, 16-18, room A6
- July 23, 15-18, room A6
- July 24, 9-13, room A12
- July 25, 14-18, room A6
- July 26, 9-12, room A12

Course Team: itsxtbn

Registration: Please, contact the teacher to register for the course.