# Master classes on Computer Vision and Convolutional Neural Networks

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**Lecture 1: Classical Pipeline of Digital Image Processing**
May 12th, 2022, (Thursday) 12:30 PM at 1G-0.3

Imaging devices are now more widely available than ever before. This offers a variety of opportunities for computer processing of digital images for a wide variety of application areas. In this lecture, we will briefly present the basic processing blocks required in designing a computer software system for the object detection problems. Such a classic approach, which is no longer the first choice of researchers and developers today, is still the only option when there is only a small amount of data and images at disposal.

**Lecture 2: The use of Convolutional Neural Networks as a Modern Approach to Digital Image Processing**
May 16th, 2022, (Monday) 12:00 PM at 1G-0.3

Deep learning computational procedures are taking over primacy also in the field of Digital Image Processing and Computer Vision. Deep Convolutional Neural Networks (CNN), as an example of such approaches, are particularly suitable for processing 2D and 3D digital images. In this lecture, we will make a brief introduction to the Convolutional Neural Networks. We will present the most typical layers of such Neural Networks; besides that, we will also give some recommendations for learning and fine-tuning. We will demonstrate with a few examples how to meaningfully utilise CNNs for the processing of digital images.

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**All ETSINF students are invited.
No registration required.**