

# Classical Computer Vision (Python)

Learn the fundamentals of computer vision, and how they can augment and complement modern deep learning-based techniques. Practice solving vision problems with little data and no ground truth.

## Image processing toolbox

Become familiar with the standard toolbox of image processing techniques.

## Detecting things in images

Learn how to analyze images and detect various objects, from primitives like edges and corners to segmentation and active contours.

## Computer vision and 3D

Learn the basics of analyzing stereo images / video to derive simple 3D scene understanding.

	Day 1	Day 2	Day 3	Day 4	Day 5
09:00	Introduction	Computer vision primitives Edges Corners Correlation, convolution	Practice session #2 Finding stuff in images	Practice session #3 Finding more stuff in images	Stereo vision pt. 2 Camera pose estimation 3D reconstruction
	Image processing basics Representation Basic operations				
	Practice session #1 Fun with image processing	Comp. vis. primitives cont. Feature extraction Preprocessing techniques	Finding stuff in images pt. 2 Binarization Active contour Segmentation		Practice session #4 Computer vision & 3D
		Finding stuff in images pt. 1 Hugh transform Pattern matching		Stereo vision pt. 1 Epipolar geometry Depth estimation	
17:00					Closing remarks

### Prerequisites:

- Python programming
- Comfortable with highschool-level mathematical topics