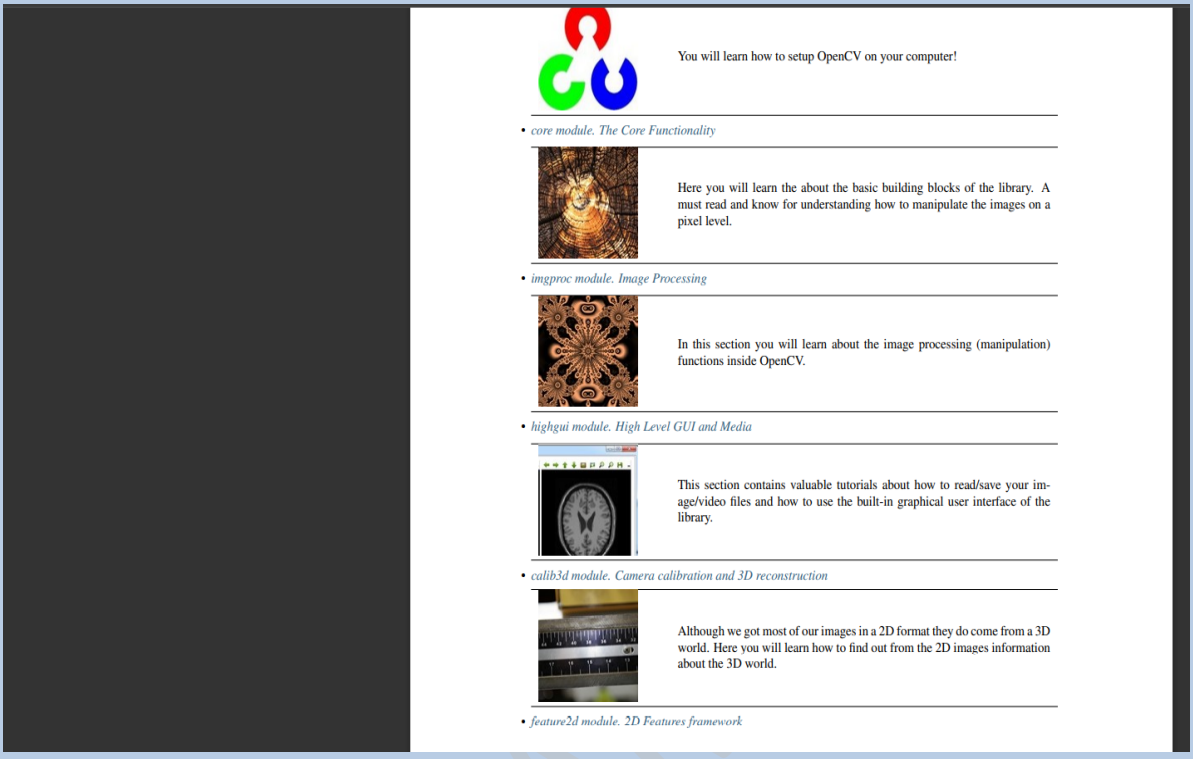
HAFTA 9 -10 DERS NOTU



You will learn how to setup OpenCV on your computer!

- *core module. The Core Functionality*

Here you will learn the about the basic building blocks of the library. A must read and know for understanding how to manipulate the images on a pixel level.

- *imgproc module. Image Processing*

In this section you will learn about the image processing (manipulation) functions inside OpenCV.

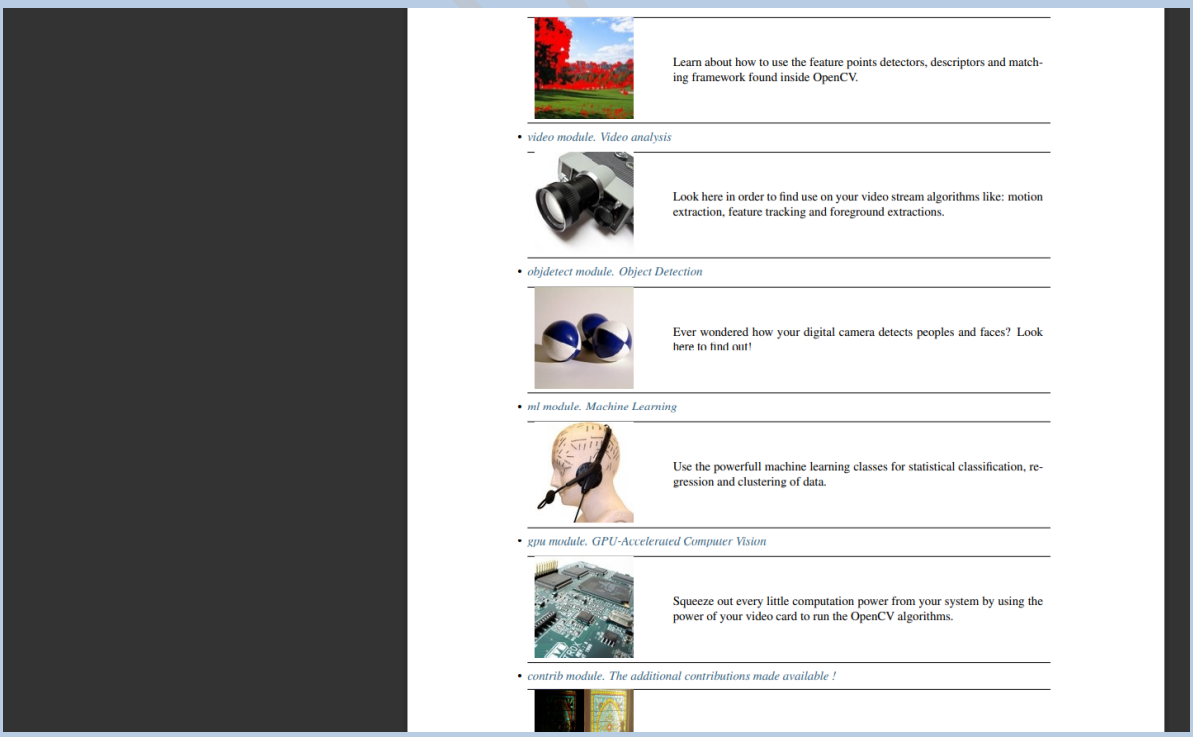
- *highgui module. High Level GUI and Media*

This section contains valuable tutorials about how to read/save your image/video files and how to use the built-in graphical user interface of the library.

- *calib3d module. Camera calibration and 3D reconstruction*

Although we got most of our images in a 2D format they do come from a 3D world. Here you will learn how to find out from the 2D images information about the 3D world.

- *feature2d module. 2D Features framework*



Learn about how to use the feature points detectors, descriptors and matching framework found inside OpenCV.

- *video module. Video analysis*

Look here in order to find use on your video stream algorithms like: motion extraction, feature tracking and foreground extractions.

- *objdetect module. Object Detection*

Ever wondered how your digital camera detects peoples and faces? Look here to find out!

- *ml module. Machine Learning*

Use the powerfull machine learning classes for statistical classification, regression and clustering of data.

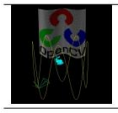
- *gpu module. GPU-Accelerated Computer Vision*

Squeeze out every little computation power from your system by using the power of your video card to run the OpenCV algorithms.

- *contrib module. The additional contributions made available !*

Run OpenCV and your vision apps on an iDevice

- *OpenCV Viz*



These tutorials show how to use Viz module effectively.

- *General tutorials*

These tutorials are the bottom of the iceberg as they link together multiple of the modules presented above in order to solve complex problems.

- **Linux**

Title: *Installation in Linux*
Compatibility: > OpenCV 2.0
Author: Ana Huamán
We will learn how to setup OpenCV in your computer!

Title: *Using OpenCV with gcc and CMake*
Compatibility: > OpenCV 2.0
Author: Ana Huamán
We will learn how to compile your first project using gcc and CMake

Title: *Using OpenCV with Eclipse (plugin CDT)*
Compatibility: > OpenCV 2.0
Author: Ana Huamán
We will learn how to compile your first project using the Eclipse environment

- **Windows**

Title: *Installation in Windows*
Compatibility: > OpenCV 2.0
Author: Bernát Gábor
You will learn how to setup OpenCV in your Windows Operating System!

Title: *How to build applications with OpenCV inside the Microsoft Visual Studio*
Compatibility: > OpenCV 2.0
Author: Bernát Gábor
You will learn what steps you need to perform in order to use the OpenCV library inside a new Microsoft Visual Studio project.

Title: *Image Watch: viewing in-memory images in the Visual Studio debugger*
Compatibility: >= OpenCV 2.4
Author: Wolf Kienzle
You will learn how to visualize OpenCV matrices and images within Visual Studio 2012.

- **Desktop Java**

Title: *Introduction to Java Development*
Compatibility: > OpenCV 2.4.4
Authors: Eric Christiansen and Andrey Pavlenko
Explains how to build and run a simple desktop Java application using Eclipse, Ant or the Simple Build Tool (SBT).

Title: *Using OpenCV Java with Eclipse*
Compatibility: > OpenCV 2.4.4
Author: Barış Evrim Demiröz
A tutorial on how to use OpenCV Java with Eclipse.

Title: *Introduction to OpenCV Development with Clojure*
Compatibility: > OpenCV 2.4.4

Title: *Introduction into Android Development*
Compatibility: > OpenCV 2.4.2
Author: Vsevolod Glumov
Not a tutorial, but a guide introducing Android development basics and environment setup

Title: *OpenCV4Android SDK*
Compatibility: > OpenCV 2.4.2
Author: Vsevolod Glumov
OpenCV4Android SDK: general info, installation, running samples

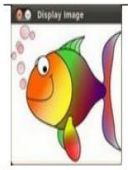
Title: *Android Development with OpenCV*
Compatibility: > OpenCV 2.4.3
Author: Vsevolod Glumov
Development with OpenCV4Android SDK

- **iOS**

Title: *Installation in iOS*
Compatibility: > OpenCV 2.4.2
Author: Artem Myagkov, Eduard Feicho
We will learn how to setup OpenCV for using it in iOS!

- **Embedded Linux**

Title: *Cross compilation for ARM based Linux systems*
Compatibility: > OpenCV 2.4.4
Author: Alexander Smorkalov
We will learn how to setup OpenCV cross compilation environment for ARM Linux.



Title: *Load and Display an Image*
Compatibility: > OpenCV 2.0
Author: Ana Huamán
We will learn how to display an image using OpenCV

Title: *Load, Modify, and Save an Image*
Compatibility: > OpenCV 2.0
Author: Ana Huamán
We will learn how to save an Image in OpenCV...plus a small conversion to grayscale

- **Want to contribute, and see your own work between the OpenCV tutorials?**

Title: *How to write a tutorial for OpenCV*
Compatibility: > OpenCV 1.0
Author: Bernát Gábor
If you already have a good grasp on using OpenCV and have made some projects that would be perfect presenting an OpenCV feature not yet part of these tutorials, here it is what you need to know.