School: Efi Arazi School of Computer Science M.Sc.

Computer Vision

Lecturer:

Prof. Yael Moses  yael@idc.ac.il

Teaching Assistant:

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Course No.: 217  Course Type: Elective  Weekly Hours: 3  Credit: 3

Course Requirements:

Final Exam

Group Code: 221021701

Language:

Hebrew

Prerequisites

Prerequisite:

52 - Calculus I
53 - Calculus II
54 - Linear Algebra I
55 - Linear Algebra II
56 - Discrete Mathematics
59 - Data Structures
69 - Logic And Set Theory
77 - Algorithms
417 - Introduction To Computer Science
Course Description

The course will cover a variety of computer vision techniques, ranging from basic methods to advanced applications. You will learn about

- Basic understanding of the challenges in solving computer vision tasks
- Basic methods for solving classic computer vision tasks
- Computer vision applications
- Theoretical as well as practical aspects of computer vision
- Basic python

Course Goals

The student will learn:

- Basic understanding of the challenges in solving computer vision tasks
- Basic methods for solving classic computer vision tasks
- Computer vision applications
- Theoretical as well as practical aspects of computer vision
- Basic python

Grading

Maturity: 50% of the final grade will be based on the written exam, and the remaining 50% will be based on the practical assignments.

Learning Outcomes

The student will learn:

- Basic understanding of the challenges in solving computer vision tasks
- Basic methods for solving classic computer vision tasks
- Computer vision applications
- Theoretical as well as practical aspects of computer vision
- Basic python

Lecturer Office Hours

Contact the lecturer to schedule office hours for any additional questions or discussions.
The course does not follow a text book. However, the following books cover most of the material that will be studied in this course:

- Computer Vision: A Modern Approach, by Forsyth D.A. and Ponce, J.
- Multiple View Geometry in Computer Vision, by Zisserman, A. and Hartley R
- Computer Vision: Algorithms and Applications, by Richard Szeliski,

In addition, journal and conference papers will be listed during the course.