

Gebze Institute of Technology
Department of Computer Engineering

BIL 669

Advanced Topics in Computer Vision
Syllabus

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Current and other useful information about this course will be kept on
<http://www.bilmuh.gyte.edu.tr/~akgul>

Course Purpose

We will explore some of the hottest and most popular topics in Computer Vision. This will be a seminar class and each student will prepare and give lectures about topics that they are interested in.

Course Prerequisites

Solid knowledge on Computer Vision or Image processing is needed. Some knowledge about Computer Graphics is also useful.

Course Material

There is no textbook. The presenters will find the relevant papers or book sections and will make them available to the class members.

Grading

The course grade will be determined approximately as follows:

- Seminar Organization and presentation 40%
- Attendance and participation 30%
- Homeworks and grading 30%

Each student will prepare a two question homework after the presentation and will grade the homeworks.

Attendance

Attendance is required.

Class email list

I will form a class email list for the announcements. Please send me an email with the subject line 'BIL669 email registration' so that I can send you class related messages.

Announcements

All the class related announcements will be made in class, at the class web page or by the class email list. Students are required to monitor the class web page regularly.

Honor Code

You should not misrepresent someone else's work as your own. Do not use work from someone else. All cases of confirmed cheating will be reported for disciplinary action.

An incomplete list of topics suggested

- View based synthesis
- Action recognition
- Video mosaicing
- Space carving
- Space-time stereo
- Image/video fusion
- Medical Imaging Devices
- Video/image bases and indexing
- Face detection/facial expression analysis
- Human vision
- Motion tracking
- Fast Marching Methods in Level Sets
- Graph based algorithms in Vision