Wright State University

CORE Scholar

Winter 2006

CEG 725-01: Computer Vision II

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Repository Citation

CEG-725 Computer Vision II

Winter 2006

Call No.: 37437
Instructor: A. Goshtasby
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Lecture: 4:10 - 5:25, M, W,
Office Location: 341 RC
Office Hours: 3:00 - 4:00 PM, M, W, or by appointment.

Location: 154 RC
Phone: 937-775-5170

No. Units: 4

Prerequisites: CEG-724

Textbook:

Computer Vision: A Modern Approach
by Forsyth and Ponce
Prentice-Hall 2003

Additional Reading: To be posted

Purpose of Course:

This course is a continuation of CEG-724 Computer Vision I. In this course the focus will be on recognition of high-level vision processes.

Contents:

1. Stereo depth perception
2. Motion analysis
3. Model-based vision
4. Smooth surfaces and their outlines
5. Aspect graphs
6. Range data analysis
7. Classification techniques
8. Relational approaches to recognition
9. Geometric inference using spatial relations
10. Creation of digital image libraries
11. Image-based rendering

Learning Goals:

In this course we will learn computer algorithms that interpret images. Some of the techniques will be practiced through computer implementation.

Projects and Exams:

There will be three programming assignments, a final project, and a presentation. A typical programming assignment will require about 20 hours of study and programming. Final project will require about 50 hours of study and programming. Each student is also required to read a paper on a topic covered in the course and present it in the class.

Grading Policy:

Programming assignments will worth 45%, the presentation will worth 10%, class participation will worth 5%, and the final project will worth 40% of the overall grade. Grades will be assigned as follows. A: [91..100], B: [81..90], C: [71..80], D: [61..70], F: [0..60].

Calendar:

Assignment 1	Handed out: 1/09/06; Due:1/18/06
Assignment 2	Handed out: 1/23/06; Due: 2/01/06
Assignment 3	Handed out: 2/06/06; Due: 2/20/04
Presentations	Assigned: 2/22/04; To be delivered: 3/01/04 .. 3/13/04
Final Project	Handed out: 2/22/04; Due: 3/15/04