Spring 2008

CEG 724-01: Computer Vision I

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No. Units: 4

Textbook:

*Introductory Techniques for 3-D Computer Vision*
E. Trucco & A. Verri
Prentice Hall, 1998

Purpose of Course:

This course covers basic techniques for low-level and some mid-level vision. The techniques include: camera calibration, image filtering and edge detection, image segmentation and feature selection, and stereo depth perception.

Contents: The following chapters in the book will be covered.

1. Introduction
2. Digital snapshots
3. Dealing with image noise
4. Image features
5. More image features
6. Camera calibration
7. Stereopsis
8. Applications of computer vision

Learning Goals:

In this course we will learn computer algorithms that extract information from images and algorithms that process such information to describe the contents of images. Some of the techniques will be practiced through computer implementation.

Projects and Exams:

http://www.cs.wright.edu/~agoshtas/ceg724.html
There will be four programming assignments and four 30-minute quizzes.

**Grading Policy:**

Programming assignments will be worth 50% and quizzes will be worth 50% of the overall grade. Following grades are guaranteed: A: 90..100, B: 80..89, C: 70..79, D: 60..69, E: 0..59.

**Calendar:**

| Assignment 1 | Assigned: 4/9, due: 4/23, 2:00 PM |
| Assignment 2 | Assigned: 4/23, due: 5/7, 2:00 PM |
| Assignment 3 | Assigned: 5/7, due: 5/21, 6:00 PM |
| Assignment 4 | Assigned: 5/21, due: 6/4, 6:00 PM |
| Quizzes      | 4/16, 4/30, 5/14, 5/28            |