# **CSE 6369** - Sign Language Recognition Spring 2012 Syllabus

Course web page: <a href="http://vlm1.uta.edu/~athitsos/courses/cse6369\_spring2012">http://vlm1.uta.edu/~athitsos/courses/cse6369\_spring2012</a>

Lecture times: Tuesday and Thursday, 12:30pm-1:50pm

Classroom: ERB 131

#### **Instructor:**

Vassilis Athitsos

E-mail: athitsos@uta.edu

Office: ERB 623

**Office Telephone:** 817-272-0155

**Office hours:** Monday and Wednesday, 4:30pm-5:30pm.

### **Teaching assistant (GTA):**

Soheil Shafiee

**E-mail:** soheil dot shafiee at mavs dot uta

Office: ERB 550

**Office hours:** MWF 3:00pm-4:00pm.

# **Course Description**

## **Contents and Objectives:**

This course will engage students in individual, student-designed projects, where students will design computer vision methods for sign language recognition. Topics of interest include:

- detecting and recognizing people in a scene.
- detecting and tracking individual body parts such as faces and hands.
- model-based and exemplar-based methods for recognizing gestures and signs.
- approaches for visualizing recognition results and the behavior of different system components.
- defining measures of performance and conducting meaningful quantitative experiments.

The main deliverable for each student will be an individual project. The project will be graded based on degree of difficulty, system performance, ability to visualize the behavior of the overall system as well as individual system components, and quality of the experimental evaluation. Students will specify their project at the beginning of the course and will deliver progress reports at each class meeting. The course grade will also depend on class participation and quality of two oral presentations that the student will make in class (one about a student-selected paper, and one about the student's project).

This course is also offered as a CSE 4392 special topics undergraduate course. Undergraduates interested in registering for this course should have some basic computer vision background, and should obtain permission from the instructor before registering. Undergraduate student projects are not expected to match the degree of difficulty and sophistication of graduate student projects.

### **Prerequisites:**

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Students are assumed to already have adequate computer vision background, by having taken the CSE 6367 course at UTA, or equivalent courses elsewhere. Alternatively, for students who do not have formal background in computer vision, they must meet with the instructor to discuss their background and obtain permission to register.

### **Course Materials:**

Course materials will be available electronically on the course web page. Changes and corrections, if any, will also be announced by e-mail to the course mailing list.

# **Grading**

Project	50%
Class Participation	25 %
Oral Presentations	25 %

Projects are due May 1. Depending on the type of project, the submission format (e-mail, web page, flash drive) will be arranged between the student and the instructor. Oral presentations describing individual projects will take place during the last two weeks of class.

# **University Policies and Services**

### **Drop Policy:**

The standard UTA drop policy applies to this course.

### **Americans With Disabilities Act:**

The University of Texas at Arlington is on record as being committed to both the spirit and letter of federal equal opportunity legislation; reference Public Law 92-112 - The Rehabilitation Act of 1973 as amended. With the passage of federal legislation entitled *Americans with Disabilities Act (ADA)*, pursuant to section 504 of the Rehabilitation Act, there is renewed focus on providing this population with the same opportunities enjoyed by all citizens.

Faculty members are required by law to provide "reasonable accommodations" to students with disabilities, so as not to discriminate on the basis of that disability. Student responsibility primarily rests with informing faculty of their need for accommodation and in providing authorized documentation through designated administrative channels. Information regarding specific diagnostic criteria and policies for obtaining academic accommodations can be found at www.uta.edu/disability. Also, you may visit the Office for Students with Disabilities in room 102 of University Hall or call them at (817) 272-3364.

### **Academic Integrity:**

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It is the philosophy of The University of Texas at Arlington that academic dishonesty is a completely unacceptable mode of conduct and will not be tolerated in any form. All persons involved in academic dishonesty will be disciplined in accordance with University regulations and procedures. Discipline may include suspension or expulsion from the University.

"Scholastic dishonesty includes but is not limited to cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, any act designed to give unfair advantage to a student or the attempt to commit such acts." (Regents' Rules and Regulations, Series 50101, Section 2.2)

### **Student Support Services Available:**

The University of Texas at Arlington supports a variety of student success programs to help you connect with the University and achieve academic success. These programs include learning assistance, developmental education, advising and mentoring, admission and transition, and federally funded programs. Students requiring assistance academically, personally, or socially should contact the Office of Student Success Programs at 817-272-6107 for more information and appropriate referrals.

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