CSCI 5673/ECEN 5673: Distributed Systems
Fall 2016 – BBA Library

Instructor

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Short Description

A distributed system is comprised of multiple computing devices interconnected with one another via a loosely-connected network. Almost all computing systems and applications today are distributed in nature for a variety of reasons, including resource sharing, fault tolerance, performance, security and geography. This course provides an in-depth coverage of the underlying principles and practices involved in the design, implementation and evaluation of a distributed system. The course will be divided into two parts. The first part will focus on the foundations of distributed system design, and the second part will focus on the current, state-of-the-art distributed systems technologies, including Internet-based services as well as distributed services built using small, mobile computing devices.

Prerequisite

- CSCI 5273 or a course in Computer Networks.

Reading Material

Selected papers from literature.

Grading

- Paper presentation and paper reviews: 15%
- Homework Assignments: 45%
- Course Project: 30%
- Exam: 15%

- Homework assignments comprised of questions from lecture material and papers will be posted on Moodle every two or three weeks. You will typically have one week to submit the answers after an assignment has been posted.
- There will be one or two programming assignments during the semester. The goal of programming assignment(s) is to enable you to gain experience with cloud programming: Amazon Web Services, specifically the EC2 cloud and S3 and Hadoop open source framework.
- There will be one exam towards the end of the semester.

Policies

- You are expected to attend all lectures. If you miss a lecture, you are responsible for finding out the material covered in that lecture. If you miss an exam, a grade of zero will be assigned, unless a valid excuse is given.
- Campus policy regarding religious observances requires that faculty make every effort to deal reasonably and fairly with all students who, because of religious obligations, have conflicts with scheduled exams, assignments or required attendance. Please notify me of any anticipated conflicts due to religious obligations as early in the semester as possible so that there is adequate time to make necessary arrangements. See full details at http://www.colorado.edu/policies/fac_relig.html
- If you qualify for accommodations because of a disability, please submit to your professor a letter from Disability Services in a timely manner (for exam accommodations provide your letter at least one week prior to the exam) so that your needs can be addressed. Disability Services determines accommodations based on documented disabilities. Contact Disability Services at 303-492-8671 or by e-mail at dsinfo@colorado.edu. If you have a temporary medical condition or injury, see Temporary Medical Conditions: Injuries, Surgeries, and Illnesses guidelines under Quick Links at Disability Services website and discuss your needs with your professor.

- Students and faculty each have responsibility for maintaining an appropriate learning environment. Those who fail to adhere to such behavioral standards may be subject to discipline. Professional courtesy and sensitivity are especially important with respect to individuals and topics dealing with differences of race, color, culture, religion, creed, politics, veteran's status, sexual orientation, gender, gender identity and gender expression, age, disability, and nationalities. Class rosters are provided to the instructor with

the student's legal name. I will gladly honor your request to address you by an alternate name or gender pronoun. Please advise me of this preference early in the semester so that I may make appropriate changes to my records. See policies at
http://www.colorado.edu/policies/classbehavior.html and at
http://www.colorado.edu/studentaffairs/judicialaffairs/code.html#student code

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http://www.colorado.edu/policies/honor.html and at
http://honorcode.colorado.edu