Course Syllabus and Details

Course Description
This course covers the latest advances in networking. The topics include Networking Trends, Data Center Network Topologies, Data Center Virtualization, Big Data, Networking Issues for Big Data, Network Virtualization in Cloud Data Centers, Cyber Security, Software Defined Networking (SDN), Network Function Virtualization (NFV), Internet of Things (IoT), Networking Protocols for IoT.

Course Objectives
The primary objective of this course is to expose graduate students to the exciting new research topics in networking. The secondary objective is to motivate graduate students to take up research work in the new and exciting areas in networking.

Course Prerequisites
CSE5311 Design and Analysis of Algorithms, CSE5306 Distributed Systems, and CSE5344 Computer Networks I.

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Class: ERB 131; MoTuWeTh 12:30PM - 2:30PM; Office Hours: TuWe 2:30PM - 3:30PM
Course site: http://crystal.uta.edu/~datta
GTA/Grader: Rodrigo Tridapalli Foes Linhares

Course Syllabus:
A set of research papers will be assigned to the class. Each student will be required to complete a thorough review, evaluate and critique at least 3 of these papers. Students will be given a chance to give their preference, but the assignment of papers will be made by the instructor. The list of research papers will be posted on the first day of classes. Paper assignments to students will be completed by second week of the semester.

Projects will be carried out by teams of two members. Typically, projects will involve: i) real prototype development on mobile devices/laptops/sensor nodes; or ii) extensive simulation studies to evaluate new algorithms/schemes. Project teams and topics will be identified by second week of the semester.

Text book: There will be no text book for this course.

References
A list of research papers for reference and study will be provided on the course page. Here is a list of journals and conferences for research papers.
Assessment

For each component, the grading will take into account each student’s rankings of their peer’s work (paper discussions, debates and projects). When not presenting, each student will be required to participate in discussions, evaluate and rank presenters/debaters/project teams, and ask questions. For each component, peer ranking weight will be 50%.

Presentations: 50%

Each paper presentation and discussion: 1 student to present, 2 students to critique and 1 student to scribe. Rest of the class will participate in the discussion and evaluation. Absence per presentation will lead to loosing 5% of the points for the presentations.

Group Project: 30%

Project problems will be finalized by second week of the semester and the expected date of completion is July 3, 2017. Presentation and demonstration of the projects will be during the last two classes.

Discussions: 20%

During the second, third and fourth week of the semester a number of research papers will be discussed. Active participation is necessary to earn points and hence a good grade. Absence per class will lead to loosing 5% of the points for discussion.

Homework Assignments: No grades awarded directly!

Class participation: Students are expected to interact actively during lectures. All students are expected to read, understand, criticize and discuss published research papers. All students are expected to attend and actively participate in peer’s presentations.

Attendance Policy

Attendance is not mandatory, but absence can lead loosing points (see above). Class participation is important to your grade.
Drop Policy: Students may drop or swap (adding and dropping a class concurrently) classes through self-service in MyMav from the beginning of the registration period through the late registration period. After the late registration period, students must see their academic advisor to drop a class or withdraw. Undeclared students must see an advisor in the University Advising Center. Drops can continue through a point two-thirds of the way through the term or session. It is the student’s responsibility to officially withdraw if they do not plan to attend after registering. Students will not be automatically dropped for non-attendance.

American with Disabilities Act: The University of Texas at Arlington is on record as being committed to both the spirit and letter of all federal equal opportunity legislation, including the Americans with Disabilities Act (ADA). All instructors at UT Arlington are required by law to provide “reasonable accommodations” to students with disabilities, so as not to discriminate on the basis of that disability. Any student requiring an accommodation for this course must provide the instructor with official documentation in the form of a letter certified by the staff in the Office for Students with Disabilities, University Hall 102. Only those students who have officially documented a need for an accommodation will have their request honored. Information regarding diagnostic criteria and policies for obtaining disability-based academic accommodations can be found at www.uta.edu/disability or by calling the Office for Students with Disabilities at (817) 272-3364.

Electronic Communication Policy: UT Arlington has adopted MavMail as its official means to communicate with students about important deadlines and events, as well as to transact university-related business regarding financial aid, tuition, grades, graduation, etc. All students are assigned a MavMail account and are responsible for checking the inbox regularly.

Academic Integrity: At UT Arlington, academic dishonesty is completely unacceptable and will not be tolerated in any form, including (but 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 (UT System Regents Rule 50101, 2.2). Suspected violations of academic integrity standards will be referred to the Office of Student Conduct. Violators will be disciplined in accordance with University policy, which may result in the students’ suspension or expulsion from the University. Homework assignments are not group projects; each student is expected to write his or her own programs individually. Students should not be showing each other their code prior to the deadline for submission.

Student Support Services: UT Arlington provides a variety of resources and programs designed to help students develop academic skills, deal with personal situations, and better understand concepts and information related to their courses. Resources include tutoring, major-based learning centers, developmental education, advising and mentoring, personal counseling, and federally funded programs. For individualized referrals, students may contact the Maverick Resource Hotline by calling 817-272-6107, sending a message to resources@uta.edu, or visiting www.uta.edu/resources.

Student Feedback Survey: At the end of each term, students enrolled in classes categorized as lecture, seminar, or laboratory will be asked to complete an online Student Feedback Survey (SFS) about the course and how it was taught. Instructions on how to access the SFS system will be sent directly to students through MavMail approximately 10 days before the end of the term. UT Arlington’s effort to solicit, gather, tabulate, and publish student feedback data is required by state law; student participation in the SFS program is voluntary.