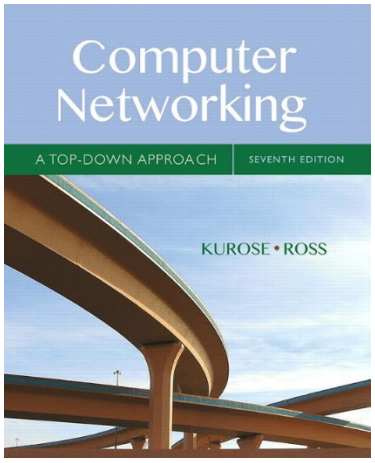
CSCI 4211: Intro to Computer Networks (Fall '20)

Computer Science and Engineering, University of Minnesota Twin Cities

Feng Qian

- **Basic Information**

  Credits: 3
  Lecturer: Feng Qian (fengqian@umn.edu)
  Teaching Assistant: Timothy Salo (salox049@umn.edu)
  Time: Mon Wed 2:30PM - 3:45PM (Online)
  Textbook: Computer Networking: A Top-Down Approach (7th edition)
  James Kurose and Keith Ross, 2017



  Office Hour: By appointment
  Canvas URL: https://canvas.umn.edu/courses/193688
  Slack URL: https://csci4211fall20.slack.com/

- **Course Format**

  Due to COVID-19, the entire course will be given online. The first lecture will be delivered over Zoom at 2:30pm on 9/9/2020. All students are required to attend. The remaining lectures will be uploaded as pre-recorded lectures to Canvas (60 to 75 minutes each lecture). It is recommended that you watch each lecture during the regular class time

(Monday/Wednesday 2:30pm-3:45pm), during which I will be live on Slack to answer your questions. All lecture videos will be archived on Zoom so you can watch them later.

- **Email Policy**
  The professor and TA can be reached at **csci4211@umn.edu**. Any course-related emails should be sent (from a UMN email address) to this mailing list address unless you want to contact the professor or the TAs individually.

- **Prerequisites**
  You should know how to use Linux. You need to have basic C/C++ programming experience and basic knowledge of data structure. C/C++ will be needed for the course projects. You only need to know one of them. We do *not* use other languages such as Java and Python.

- **Grading Policy**
  Midterm exam (75-minute "take-home" exam): 25%
  Final exam (120-minute "take-home" exam): 30%
  Homework (about 5): 15%
  "Warm-up" C/C++ Programming Assignment: 3%
  Project (individual C/C++ programming): 27% + 10% Bonus

- **Late Policy**
  Late submissions of homework receive no credit.
  Late submissions of projects receive partial credit, as follows.
  Late for no more than 12 hours: 80% of credit.
  Late for more than 12 hours but no more than 24 hours: 70% of credit.
  Late for more than 24 hours but no more than 48 hours: 60% of credit.
  Late for more than 48 hours: no credit.

- **Tentative Course Schedule**
  See the next page.

- **Honor Code**
  All students must follow the UMN Honor Code:
  https://regents.umn.edu/sites/regents.umn.edu/files/policies/Student_Conduct_Code.pdf

  Unless otherwise noted, all projects and homework are individual assignments, and no collaboration among students is allowed. Any violations of the honor code will be dealt with strictly.

Note that the schedule is tentative and is subject to change. Always keep an eye on Canvas for the latest announcements and updates.

Week of	Topic
9/7	Course introduction (on 9/9)
9/14	Socket programming I
9/21	Socket programming II
9/28	An overview of the Internet
10/5	Application layer, Web, HTTP
10/12	Transport layer overview, UDP, reliable data transfer
10/19	Reliable data transfer, TCP
10/26	TCP (cont.)
11/2	DNS, Midterm exam (tentatively on 11/4)
11/9	IP layer
11/16	Routing algorithms
11/23	Routing algorithms
11/30	MAC layer, Project Due
12/7	MAC layer, course summary
12/14	Flexible slots / TBD
12/17-12/23	Final exam week

- **Important Dates to Observe (all time in CDT/CST)**
  The first lecture (must be attended on time): 2:30pm, 9/9
  Take-home midterm exam: 2:30pm-3:45pm, 11/4 (tentative)
  Project due: 11:59PM, 11/30
  Final exam: during 12/17 to 12/23, TBD
  Deadlines of homework and “warm-up” programming assignment: to be posted in the “Assignments” section on Canvas.