EECS 325/425 Computer Networks I

An Wang

Introduction

- Ph.D. from CS Dept., George Mason University
- Research Interest: software-defined networking, data center and cloud security, IoT and edge computing
- Research Goal: address security and scalability issues through innovation in network architecture, cloud and data center systems

Class Information

- Instructor: An Wang
- Office: Olin 407
- Email: axw474@case.edu
- Office hours: Thursday 2:15 p.m. – 4:15 p.m. or by appointment
- Course page: **All materials and assignments will be updated in Canvas**
- Prerequisite: EECS 233 (or equivalent)
- We will use emails for communications; you must have a Case account and check the account for messages periodically, if not daily.

Textbooks & Resources

- Recommended: Kurose & Ross, Computer Networking – A Top-Down Approach (7th Edition), Wesley
- Recommended: Larry Peterson and Bruce Davie, Computer Networks –A Systems Approach (5th Edition), Morgan Kaufmann
- Software & Tutorial Resources
  - VirtualBox Environment
  - Course virtual machine image
    - Hints on VM Setup
  - Mininet: Virtual network emulation environment
    - Mininet Walkthrough
  - Get familiar with C & Python languages
- Keep an eye on for networking research
  - SIGCOMM, NSDI, INFOCOM, ICNP, IMC …

Tentative Course Topics

- Computer Networks and the Internet
- Application Layer
- Transport Layer
- The Network Layer: Data Plane and Control Plane
- The Link Layer and LANs
- Security in Computer Networks
- Multimedia Networking

Important Dates

- First class: Jan 14th
- Last day to drop/register: Jan 25th
- Spring break: Mar 11th – 15th
- Midterm: Mar 7th (Tentative)
- Last class: Apr 25th
- Final exam: May 2nd

Grading

- Programming assignments – 20%
  - *NO credit* if your code does not compile
  - Unless under prearranged conditions, late homework/projects lose 20% credit within 3 days after the respective deadlines and will not be accepted 3 days after due
- Homework – 15%
  - Questions from textbook
- Midterm – 30%
- Final – 35%
- Grading is proficiency-based. Cutoffs will be in the vicinity of, but not higher than:
  A > 90%, B > 80%, C > 70%

Important Notes

- Missed exams must be arranged with the instructor at least a week ***BEFORE*** the exam date.

- Follow links in the syllabus for

  - Disability

  - School Calendar

  - Honor Code – homework and project are ***INDIVIDUAL*** efforts.

Important Notes (con't)

- Projects: a project is always due ***by 11:59 PM*** on the ***Monday or Wednesday before*** the class date, unless specified otherwise.
  - Please submit your project code to Canvas.

- Homework: Submit before the class ***(Tuesday or Thursday 1:00 PM)*** on the class date. Please type write your homework. Otherwise, it is at the grader's discretion on your handwriting.