Welcome to TDTS04&11: Computer Networks

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Welcome to TDDE35 Large-Scale Distributed Systems and Networks (11 ECTS)

Examiner: As. Professor Niklas Carlsson
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https://www.ida.liu.se/~nikca89/

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Course Info

- https://www.ida.liu.se/~TDTS04 (or ~tdts11)
- Zoom link to lectures by email (to avoid misuse)
  - Might be recorded for future use
- Room for labs created in Microsoft Teams
  - Labs in groups of 2
  - If you cannot register, contact TA
- Lisam (lisam.liu.se) for remote exams and automatic labs (in future)

Course Content

- Written exam (remote?)
  - Grads: ‘fail’, 3, 4, 5.
- Four (4) mandatory lab assignments
  - Must pass all four labs
  - Eight lab opportunities
  - Please register on webreg right away!! (deadline on Wed)
- One (1) optional assignment
  - Up to 4 bonus marks for exam
- Twelve (12) lectures + one (1) exam prep.
- See website for more information …

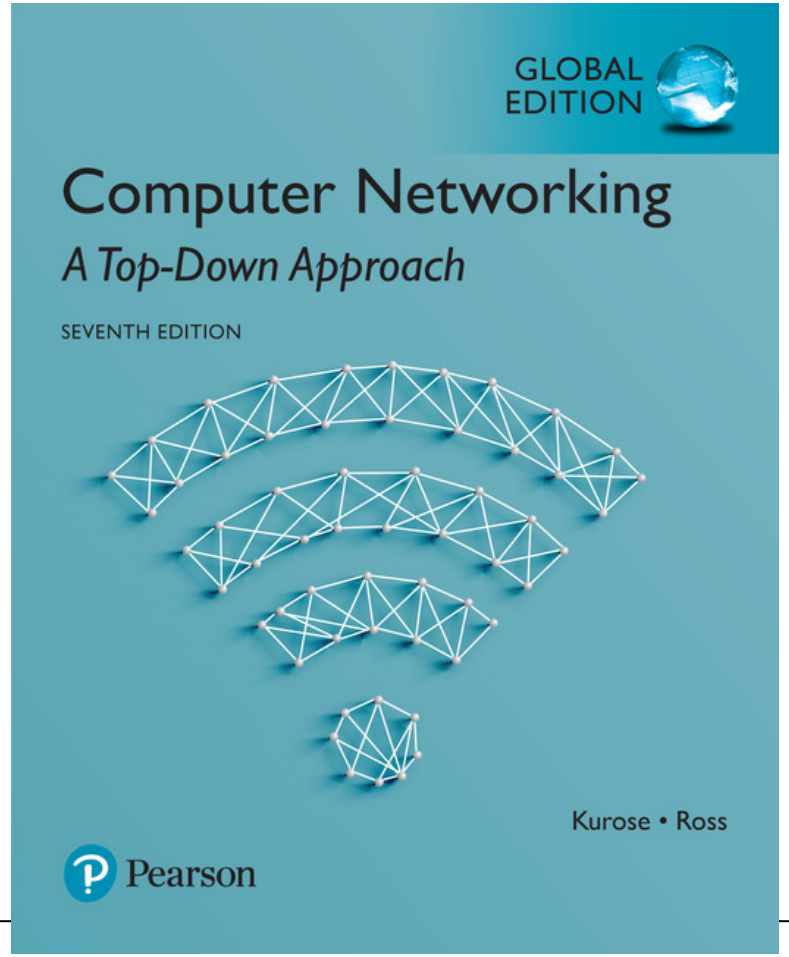
People

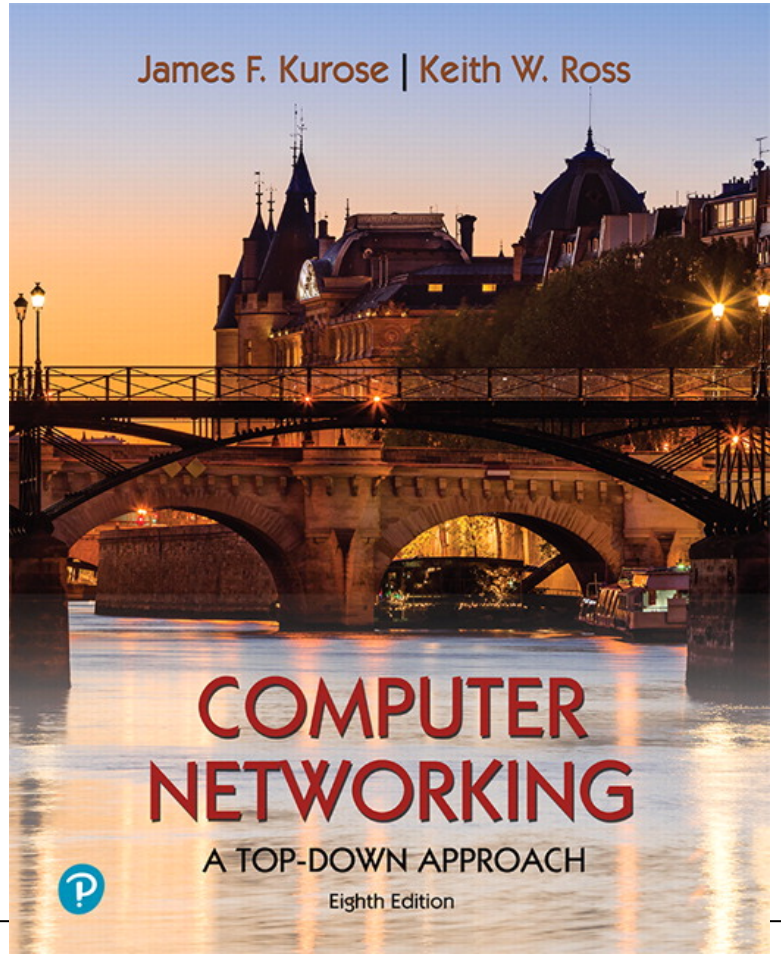
- Examiner and Lecturer
  - Andrei Gurtov, Professor
  - Research area: Networking, network security, cloud computing, future Internet architectures, 6G, …
- Examiner and Lecturer (TDDE35)
  - Niklas Carlsson, Associate Professor
  - Research area: Design, modeling, and performance evaluation of distributed systems and networks
- Lab assistants
  - Carl Magnus (TDTS11): Most experienced!
  - TDTS04 GR A: Dr. Ioannis Avgouleas (ioannis.avgouleas@liu.se)
  - TDTS04 GR B: Suleman Khan (suleman.khan@liu.se)
  - TDTS04 GR C: Mohammad Borhani (mohammad.borhani@liu.se)
- Director of studies
  - Patrick Lambrix

About the Lecturer (Andrei)

- Working hard for 20 years to make the Internet better
- Co-author of 5 RFCs, co-chair at Internet Engineering Task Force
  - including NewReno TCP, one of the most used (Berkeley)
- 4 books on 5G, P2P, security protocols, SDN
- ACM Distinguished Scientist
  - Over 200 journal and conference papers
- 15 supervised PhD theses
  - Alumni at Google, SuperCELL, Nokia, Ericsson, VMware
- IEEE Distinguished Lecturer
  - Tours: Puerto Rico, AbuDhabi, Lebanon, Panama, Dominican Republic, Novosibirsk

Course book: 7th or 8th edition (coming)





List of abbreviations

- https://www.ida.liu.se/~TDTS04/timetable/abbreviations.pdf

Why to attend lectures?

- Opportunity to ask questions!
- Demos of protocol animations
- Know which parts/slides important for exam
- Sample exam questions and solutions
- Explanatory real-world examples
- Organize yourself for chapter progress/labs
- But can also watch recorded lectures

Lecturer's Wish List

- Buy and read the textbook
  - Very good textbook, written by highly regarded researchers in the field
  - No time to cover everything during lectures
  - Read the corresponding chapter before the lecture!
- Work hard
  - Pay attention during lectures
  - Make sure you understand the material
  - Start assignments early (some will take time)
  - Ask questions! Double hard to keep contact in remote mode…
- Follow deadlines

Last year's evaluation 2019

- ~2 average grade for TDTS04 and ~3 for TDTS11
- Had to move exam last minute due to Covid
- Complaints about lab instructions, lecture format
- Now fully in remote mode
  - Slide walkthrough with commentary
  - TDTS06 grade was 4.85

Lab Updates

- HTTP assignment has received some minor tweaks.
- TCP assignment:
  - Made question 1-12 required to answer (earlier considered “practice questions” and only explicitly answered by some students)
  - Question 13, the most confusing of them all, has been updated to better align with the original question.
- Net Ninny assignment (replaced with Fake News):
  - Updated/removed some text to make the assignment more clear
- Distance Vector Routing assignment:
  - Improved instructions and Java template
  - Working on C and Python versions

What's Next After This Course?

- Consider other course where I teach
  - TDDD17 Information Security, 2nd course, Lecturer and lab leader
  - TDDE21 Advanced Project: Secure Distributed and Embedded Systems, Examiner
  - TDDE53 Bachelor project on Secure Mobile systems, thesis supervisor
- Contact me for Master thesis topics, in LiU or industrial
- PhD positions available after graduation