

# Welcome to TDTS04/TDTS11

# Computer Networks

&  
Distributed Systems/Internet Protocols

Examiner: Professor Andrei Gurtov

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<http://gurtov.com>

# 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/>

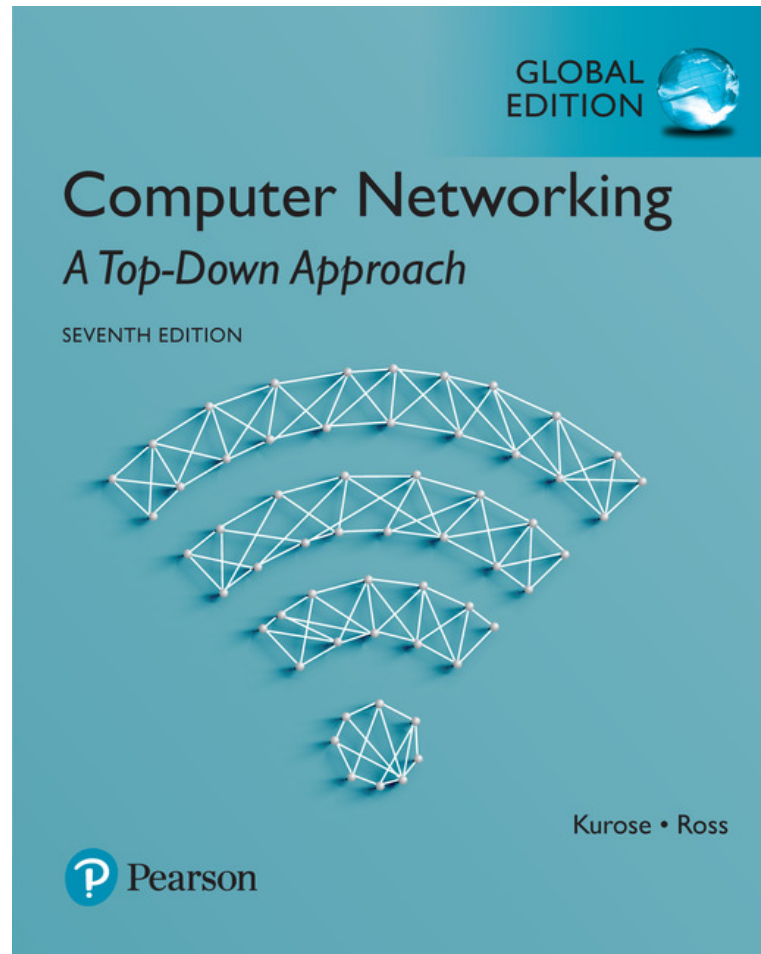
# People

- Examiner and Lecturer
  - Andrei Gurtov, Professor
  - Research area: Networking, network security, cloud computing, future Internet architectures, peer-to-peer communication, ...
- 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): Java
  - Le Minh Ha (TDTS04 groups A&B): Python, Java, C/C++
  - Sanjana Vupparige Vijaykumar (TDTS04 group C): C++, Java
- Course Secretary
  - Annelie Almquist
- Director of studies
  - Patrick Lambrix

# Course Overview

- Written exam
  - 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 Jan 21)
- One (1) optional assignment
  - Up to 4 bonus marks for exam
- Twelve (12) lectures + one (1) exam prep.
- See website for more information ...

# Course Book



# Our expectations

- 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! No questions = everything is clear, can increase the pace
- Follow deadlines

# About the Lecturer (prof Gurtov)

- Working hard for 20 years to make the Internet better
- Co-author of 5 RFCs, co-chair at IETF
  - 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

# What to expect? (What will be covered?)

- Design principles for computer networks
  - Conceptual view of Internet architecture
- Design, resource, and performance tradeoffs
  - General working knowledge of protocols/applications
  - Detailed knowledge of selected protocols/applications
  - Some practical hands on experience
- Glimpse into the future of the Internet
  - Emerging trends and technologies



# Why to Attend the Lectures?

- Opportunity to ask questions!
- Demos of protocol animations
- Know which parts/slides important for exam
- Sample exam questions and solutions
- Explanatory whiteboard figures
- Organize yourself for chapter progress/labs

# List of Abbreviations

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

# Changes from last year

- Improved lab instructions
- Lists of slides/topics of importance
- Detailed schedule
- Updated course pages with animations
- Linked bonus lab
- Btw, similar course TDTS06 got excellent feedback (>4)

# Questions?

- [www.menti.com](https://www.menti.com) and give a code

So let's start the course ...