

Internet Measurement

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General information (1)

□ Area:

- Diplom (Informatik): BKS – Hauptstudium Vertiefer
- Master (Informatik): Kommunikationsbasierte Systeme
- Bachelor (Informatik): Kommunikationstechnik
- Master (techn. Informatik): Techn. Anwendungen

□ Time

- Thursday: 10:00 – 12:00

□ Room

- MAR 0.011

□ Language

- English (questions can be asked in German!)

General information (2)

□ Web site

- <http://www.inet.tu-berlin.de/menue/teaching0/ss2014/im14/>

□ ISIS

- <https://www.isis.tu-berlin.de/2.0/course/view.php?id=1574>

□ Prerequisite:

- Grundstudium
- NPA, TKN or equivalent knowledge of the Internet

General information (3)

- ❑ Lecture with integrated exercises
 - Lectures
 - In class practical exercises
 - Good participation will lead to bonus on grade
 - Passing of the exam necessary to get bonus
 - 2 SWS / 3 LP
- ❑ Exam
 - For those that need it 😊
 - Oral exam after semester end

General information (4)

- ❑ Co-Lecturer: Dr. Ramin Khalili
- ❑ Past:
 - Universite Pierre et Marie Curie: PhD in CS (Networking)
 - EPFL: Senior researcher in networking
- ❑ Now:
 - T-Labs & TU Berlin (FG INET)
 - Senior Researcher in Networking
- ❑ Research areas:
 - Design and optimization of networking protocols
 - Resource management and load control in wireless networks

General information (5)

- ❑ Co-Lecturer: Georgios Smaragdakis, Ph.D.
- ❑ Past:
 - Technical University of Crete
 - Diploma in Electrical & Computer Engineering
 - Boston University, Boston, USA
 - Ph.D. in Computer Science (Networking)
- ❑ Now:
 - T-Labs & TU Berlin (FG INET)
 - Senior Researcher in Networking
- ❑ Research areas:
 - Content Distribution, Internet Measurements

What is this course?

- ❑ Not an introduction to the Internet
- ❑ Focus: Measuring the Internet
 - Methodology
 - Why to measure
 - How to measure
 - How to interpret measurement results
 - How to do performance evaluation
 - How does the Internet actually look like
 - Application characteristics
 - Traffic characteristics
 - Topology / route choice

Reading

- ❑ Mark Crovella, Balachander Krishnamurthy.
Internet Measurement: Infrastructure, Traffic and Applications.
Wiley, 2006.
- ❑ Raj Jain
The Art of Computer Systems Performance Analysis.
Wiley & Sons, New York, 1991
- ❑ Kurose and Ross:
Computer Networking: A Top-Down Approach Featuring the Internet.
Fifth edition, Addison-Wesley, 2009
Preliminary first edition online: student (quarter24)
- ❑ ... see Web