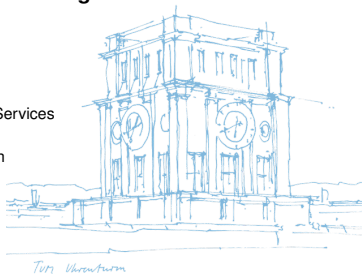ΤΛΠ

Seminar: Innovative Internet Technologies and Mobile Communications (IITM)

Info Meeting

Prof. Dr.-Ing. Georg Carle,
Dr.-Ing. Stephan Günther, Benedikt Jaeger

Friday 1st February, 2019

Chair of Network Architectures and Services
Department of Informatics
Technical University of Munich

Basic Information

Lecturer

- Prof. Dr.-Ing. Georg Carle

Organization

seminar@net.in.tum.de (only use this mail address!)

- Dr.-Ing. Stephan Günther
- Benedikt Jaeger

Overview

- Main Language: English
  - paper and reviews in English
  - talk can be in German or English
- Extent: 2 SWS, (5 ECTS)
  - 5 ECTS · 30 h = 150 h of work expected from you
- Course Type:
  - For B. Sc. Students: Advanced Seminar Course (Seminar)
  - For M. Sc. Students: Master's Seminar (Master-Seminar)

Seminar Procedure

First version of your paper

- Agree on the content with your advisor
- Use the provided paper template (LATEX)
- Keep in touch with your advisor
- Try to finish in time so your advisor can give you feedback
- Your paper must be 4 pages in IEEE 2-column style (including references etc.)
- Expected language for the paper is English

Present your topic

- German or English
- 20 min talk + 5 min discussion

Peer review

- You have review two papers of your fellow students
- Reviews are part of your final grade
- Review language is English

Final version of your paper

- Use the received reviews to improve your paper
- You will also receive feedback from the advisor
- If you and your advisor agree → publication in the seminar proceedings

Seminar vs Block Seminar (former Future Internet)

- Both seminars offer similar topics
  - Check the `proceedings`
- Block Seminar (IN4600)
  - Topic presentation: Friday, February 22nd, 14:00, room 03.07.023
  - This is just a few days after the matching assignments are published!
  - Seminar paper to be written in lecture free time (only few weeks until first version)
  - Talks as block in the last weeks of the lecture free time (April 11th / 12th, whole day)
  - Registration limited to 16 participants
- Seminar (IN4595)
  - Topic presentation: Friday, April 26th, 14:00, room 03.07.023
  - Seminar paper to be written during the semester
  - Weekly sessions on Friday, 14:00, starting in July (probably 4 meetings)
  - Registration limited to 14 participants

1. Both of your paper submissions, 4 pages in IEEE (50 %)
   - 1st version: 37.5 %
   - 2nd version: 12.5 %
2. Your talk, 20 − 25 min, following discussion, and feedback (25 %)
3. Your reviews of papers from other seminar participants (25 %)

Influencing Factors

- First version of paper must be acceptable
  - Grade worse than 4.0 → disqualification (seminar graded as 5.0)
  - Less than 4 pages in the seminar template → disqualification
    (not 3.1 pages + empty space, not 4 pages + references)
- Observe the deadlines
  - Advisor meetings are compulsory
  - You are provided with git repositories to check in your work and submissions
  - Hard deadline for each submission
- No submission
  - 1st version of paper → disqualification (seminar graded as 5.0)
  - Other submissions → grade 5.0 for the concerning part
- Write the paper yourself
  - Plagiarism → disqualification (and we will check!)
  - Attempted cheating will be reported to the examination office
  - Summary when and why to cite: `citation guide`
  - Regularly push your progress to avoid misunderstandings
- Absence during talks without valid excuse
  - 0.3 degrading per missed talk on your presentation grade
  - Talk graded worse than 4.0 → disqualification (seminar graded as 5.0)

Topic Handling

- You get some literature or hints where to start from your advisor
- This is just to get you started
- Find appropriate (scientific) sources yourself

- scholar.google.com
- acm.org
- ieee.org
- semanticscholar.org
- Your sources' sources
- …
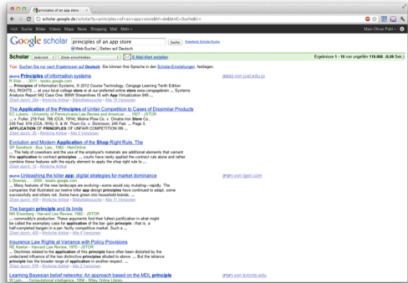
TUM provides access to non-free papers via eaccess.ub.tum.de.

Just presenting the given literature is **not** enough

- Advisors create topics within their research context.
  - They have broad knowledge about the context of your seminar topic.
- Your task is to do research and write a scientific text about a specific topic beyond basic lecture content.
  - Your advisor is not responsible for your tasks.
- Adhering to the deadlines is your responsibility.
  - Your advisor will not remind you.
- Advisors will help you if you ask them to.
  - Keeping contact with your advisor allows you to write a much better seminar paper.
- Advisors can give you feedback.
  - Ask for feedback about your first paper version, the peer reviews, your slides for the talk, etc.
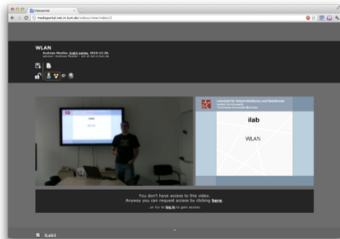
Talk Procedure

- Prepare your talk
  - Finished slides must be discussed with your advisor 1 week before the talk.
  - Advisors may offer the opportunity of rehearsal talks.
- Present your work
  - Scientific talk
  - Present the main results & give an interesting talk
- Session chair for one talk
  - Introduce the speaker
  - Watch the time constraints
  - Try to get the discussion started after the talk (ask at least one question if nobody else does)
- Mandatory attendance on all sessions
  - If you cannot attend for a good reason, contact `seminar@net.in.tum.de` **in advance**
  - Attending the talks is mandatory for passing the course
    (schedule of talks will be published after the first submission)

Talk Procedure

Improving Your Presentations Skills

- You have the chance to get your talk recorded
  - Have a **look at yourself** after the talk!
  - Your talk was great? Share it and show it to your friends
  - You fully control the access! Initially only you can access it
- Get feedback from your colleagues (not graded)
  - Feedback forms to be filled out during the talks

- We give the opportunity to publish your papers!
  - If both you and your advisor agree
  - Proceedings of the last years can be found on
    www.net.in.tum.de/publications/seminar%20proceedings
- Look at old proceedings
  - Examples of papers we consider "good"
  - Get an idea of the topics we cover
- Best Paper Award (only published papers)
  - We will choose the best paper in each seminar
  - They will receive a certificate and a hardcopy of the proceedings

- Registration is handled centrally on a dedicated web platform
  1. You enter your seminar preferences
  2. We enter our students preferences
  3. The system computes a **student-optimal** matching

  More info: docmatching.in.tum.de

- If you want to be preferred by us, register with your student card when leaving the room
  - We will prefer you for both seminars
  - The list is closed after the event

- The result of the matching is binding, **you cannot resign** from the course afterwards
  - Only enter courses that you really want to participate in
  - We accept withdrawals only for special reasons (e. g. not getting any of your topic preferences)

Matching – Example 1

Your preferences

1. `$your_favorite_seminar`
2. `$i8_seminar`
3. `$not_so_interesting_seminar`

- Putting your matriculation number on our list does **not** reduce your chance of being assigned to `$your_favorite_seminar`
- However, your chance of being assigned to `$i8_seminar` is increased if you cannot be assigned to `$your_favorite_seminar`

Matching – Example 2

Preferences Student A

1. $very_popular_seminar
2. $popular_seminar

Preferences Student B

1. $popular_seminar

- The chances of getting assigned (to any course) are not higher for Student B compared to Student A
- The matching system works best **for you** if you honestly enter all your preferences
    - Giving same priority to multiple courses is possible

Preliminary Schedule

Block Seminar	Dates
Topic presentation	February 22, 14:00
Upload paper (1st version)	April 7, 23:59
Talks	April 11 / 12, whole day
Upload reviews	April 28, 23:59
Upload paper (2nd version)	May 12, 23:59

Seminar	Dates
Topic presentation	April 26, 14:00
Upload paper (1st version)	End of June
Talks	tba
Upload reviews	tba
Upload paper (2nd version)	tba

- Recent Activity in P4
- $P4_{16}$ INT Applications
- VPP for Virtual Switching
- Micro-sized Triplestores and their Capabilities
- Resilient Service Compositions
- Service Management in IoT
- Reproduction of Internet Toplist Analysis
- Available Bandwidth and Throughput Estimation
- Time-Sensetive Networking (TSN) in the Linux Kernel
- A survey of electronic micropayment schemes
- Peer-to-Peer Matrix
- Fault tolerance in SDN

- Network State Consistency in SDN with Distributed Controller
- Surveying the depth of user behavior profiling in mobile networks
- Models for Packet Loss and Delay
- A survey on Network Coding implementations
- Energy cost of different caching approaches
- Survey of caching approaches / strategies in named data networking
- Information Centric Networking implementations of routing
- Secret Sharing / Secret Splitting
- Multi Key Ciphers
- Literature and Code Review of Packet Processing Systems in Rust / Go

In General, write emails only to
`seminar@net.in.tum.de`