

#### **Course Overview**

#### **Wireless Internet Communication Seminar**

https://www.ce.cit.tum.de/cm/teaching/winter-term-2025-26/2025-seminar-wireless-internet-communication/

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#### **Outline**

- 1. Seminar Structure and Grading Scheme
  - a. Reviews
  - b. Presentation
  - c. Learning Outcomes
- 2. HotCRP Example and Reviewing Process
- 3. Presentation Examples
- 4. Organizational Matters



#### 1. Seminar Structure and Grading Scheme

- Regular conference paper publication process:
  - Call for Papers: Submission until specified date
  - Round of reviews by technical committee: decision to accept/reject?
  - Presentation & discussion of accepted papers in conference sessions
- In this seminar: Reviews + Presentations

**Grading** 

- Pre-selected (published) papers on Wireless Internet Comm.
- Each student reviews papers for the sessions

40%

- Include 3 in-depth questions about the paper
- Focus on relevance of future work
- Each student presents 1 paper (~12-13 min + 5-7 min discussion) 40%
  - Include your own thoughts on the paper in 1 slide
- Discussion participation throughout the seminar

**20**%



#### 1. Learning Outcomes

- Learn about latest research in the area of Wireless Internet Communication
  - Current problems, state-of-the-art methodology, open questions
- ☐ Acquire general skill set by taking roles of a reviewer and a presenter.
  - Scientific conference/workshop, peer reviewing, paper publication process
    - How are good research papers presented in written form?
    - Importance of reproducibility and artifacts
  - Critical thinking while reading/reviewing papers and listening to talks
    - Questioning content, identifying strengths/weaknesses
    - Extract key results and main findings → takeaways
    - Presentation and discussion of results in concise manner for a talk



# 2. HotCRP Example (https://hotcrp.com/)

Sea	arch	(All)		Searc
	(All) in Submitted papers \$	Search		
	Search Advanced search Saved searches View options  ID▼ Title	# Re	views	RepC
	#1 Characterizing a Meta-CDN 🍌	(	0	
	#2 Open Connect Everywhere: A Glimpse at the Internet Ecosystem through the Lens of the Netflix CDN	٨	6	12
0	#3 A First Look at QUIC in the Wild 🎩		6	
	#4 Real-time Video Quality of Experience Monitoring for HTTPS and QUIC 📙		5	(1.
	#5 Mission Accomplished? HTTPS Security after DigiNotar 📙	5	/6	
	#6 Understanding the Role of Registrars in DNSSEC Deployment 🀱		7	
	#7 Performance Characterization of a Commercial Video Streaming Service		0	
	#8 Vroom: Accelerating the Mobile Web with Server-Aided Dependency Resolution &		6	(1
0	#9 Deep Diving into Africa's Inter-Country Latencies 📙	6	/7	12.0
	#10 Inside the Walled Garden: Deconstructing Facebook's Free Basics Program &		6	
	#11 Cell Spotting: Studying the Role of Cellular Networks in the Internet 📙	6	/7	(1.
	#12 Dissecting VOD Services for Cellular: Performance, Root Causes and Best Practices 💹		7	0
	#13 Challenges in Inferring Internet Congestion Using Throughput Measurements 👃	5	/6	13
	#14 TCP Congestion Signatures 👃	7	/8	

Write Review	
	oload form: Choose File No file chosen Go
<u>D0</u>	ownload form • Tip: Use Search or Offline reviewing to download or upload many forms at once.
Paper summary	
Please summarize	the paper briefly in your own words.
Strengths	
	er's strengths? You may comment on the importance of the problems addressed,
the novelty of the	proposed solutions, the technical depth and potential impact.
Weaknesses	
	er's weaknesses? Just a couple sentences, please.
what are the pape	er's weaknesses? Just a couple sentences, please.
Technical Aspect	ts
Is the research qu	estion well-motivated? What technical aspects are missing to understand the
paper?	
Security Conside	erations
Did the authors co	over attacks and defense mechanisms (implicitly/explicitly)? Are there others that
are missing?	
Presentation of F	Proposal
	convince the reader to read the full paper? Is the paper well-written and well-
	Does the conclusion address the problem identified in the introduction?



### 2. Reading Papers

Keshav's three-pass approach (<a href="https://doi.org/10.1145/1273445.1273458">https://doi.org/10.1145/1273445.1273458</a>)

- 1. Bird's-eye view (5 10 minutes)
  - Read abstract, introduction
  - Check section headings and references
  - Read conclusion and for known references
- 2. Key points (1 hour)
  - Read the full paper, ignoring details (e.g., proofs, mathematical formulas, ...)
  - Look at figures and mark important references
- Full understanding (4 5 hours) (we do not expect this of you!)
  - "Re-implement" the paper from the same assumptions
  - Challenge assumptions and details; "How would I have done this?"
  - Find implicit assumptions, missing related work and other issues (e.g., shoddy evaluation)



### 2. Reviewing Process - Preliminaries

- Reviewing process: Invite to HotCRP instance
  - Check email address (login) in invitation email
  - Put your name into the registration/account form, otherwise no further information needed
  - Papers will be imported to HotCRP for reviewing



### 2. Reviewing Process

- Review form provides prompts to assist in commenting on the papers
- Use of LLMs for writing reviews is prohibited. You can use tools like Google Scholar, Connected Papers, ResearchRabbit, NotebookLM or Undermind to do a literature survey only. Beware that Al-based tools might hallucinate.
- Find the context of the paper, the state of the art and the research gap.
  E.g., what else have people tried, do newer approaches exist?
- Based on that context, argue about the impact that the paper has on the state
  of the art and on future work.
- Since above tools do a lot of the analysis of strengths and weaknesses automatically for you, our review grading will focus on you conveying the key ideas of the paper and the impact the paper had.



#### 2. Reviewing Process

#### Writing hints:

- Write proper sentences in paragraphs, not bullet points
- We will use a plagiarism checker to detect LLM use
- Be constructive: when critizing something, try to understand the authors' intent and suggest concrete steps for improvement
- Examples for public paper reviews:
  - The WebConf 2025 (OpenReview)
     <a href="https://openreview.net/group?id=ACM.org/TheWebConf/2025/Conference">https://openreview.net/group?id=ACM.org/TheWebConf/2025/Conference</a>
  - The WebConf 2024 (OpenReview)
     <a href="https://openreview.net/group?id=ACM.org/TheWebConf/2024/Conferenc">https://openreview.net/group?id=ACM.org/TheWebConf/2024/Conferenc</a>



## 2. Reviewing Process

- For in-depth questions:
  - Avoid generic questions such as "Can we apply AI/ML?"
  - Try to ask questions that, e.g., propose adjusting the design or configuration of the study and briefly elaborate on why
- Reviews due until presentation date if not presenting on that day
  - i.e., before a session, you either review OR prepare a presentation
- Overall 6 reviews throughout the seminar



#### 3. Presentation Examples

- Presentations typically follow the structure of the paper
  - Motivate the subject

(~15% of time)

Explain methodology or system design

- (~40% of time)
- Keep it simple: don't lose yourself in details; add background if needed
- Present and discuss main/most interesting results

(~30% of time)

- Usually summarized in abstract
- Summarize main findings/conclusions and describe outlook (~10% of time)
- Add your own thoughts on the paper in 1 slide

(~5% of time)

- E.g., what are strengths, weaknesses, limitations
- ☐ Practice your presentation: stay within the time limit of ~12-13 min!
  - Get feedback from your fellow students



## 4. Organizational Matters (1)

- Paper selection
  - List of seminar papers on Moodle
  - Send us your preferences by Oct 26, 2025, 23:59 via Email:
    - Papers: Top 5 papers in descending order
    - Presentation dates: Top 3 presentation dates in descending order
  - We will assign the papers and presentation dates by Oct 28, 2025, and announce them via Moodle.



## 4. Organizational Matters (2)

 Seminar sessions will take place roughly every two weeks to provide enough time for reading and preparation of papers via BBB (<a href="https://bbb.cit.tum.de/roh-apn-vnm-bnd">https://bbb.cit.tum.de/roh-apn-vnm-bnd</a>)

Sessions start at 16:00

- Next dates:
  - Preferences October 26 (check Moodle!)
  - Assignment October 28
  - Session 1 November 12
  - Session 2 November 26
  - Session 3 December 10
  - Grading Early January