

Offensive and Defensive Measures in Wireless
Security — SS 2022
Seminar

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What is this seminar about?

- ▶ **Offensive** measures in wireless communication:
 - ▶ Interception
 - ▶ AIR-FI
 - ▶ Jamming and Mimicking
 - ▶ Tracking
- ▶ **Defensive** measures in wireless communication:
 - ▶ Privacy preserving features
 - ▶ Proximity

Process

- ▶ Phase **I**: Select a **topic**
- ▶ Phase **II**: Find **literature**
- ▶ Phase **III**: Do your **reading / experiments / programming**
- ▶ Phase **IV**: **Writing** phase I
- ▶ Phase **V**: **Peer review**
- ▶ Phase **VI**: **Writing** phase II
- ▶ Phase **VII**: Final **talks**

Exact schedule will be published once list of participants is known.

Phase I

1. We will provide you with a list of **our topics of interest**
2. You will **choose / propose** your own topic and either:
 - ▶ Work out the offensive / defensive measures
 - ▶ Reproduce the results of an existing conference paper
 - ▶ Create your own Systematization of Knowledge (SoK) paper
3. In all cases, you will put your work into context of existing literature
 - ▶ e.g at Usenix Security Symposium, S&P, ACM CCS, NDSS

Some Topics of Interest

- ▶ Overshadowing (LTE)
- ▶ BLE Privacy
- ▶ Payment Systems
- ▶ Software Defined Radios/Frameworks
- ▶ Jamming and Mimicking
- ▶ Wireless Positioning
- ▶ Key Agreement in Peer-to-Peer Wireless Networks
- ▶ And many more
- ▶ **Plus:** provide us with your own topic proposal!

Registration

- ▶ Registration using the **matching system**
- ▶ **No** letter of motivation
- ▶ approx. **16** slots

Time and Place

When?

We pick the slot

- ① With the least collisions
- ② Most comfortable for you

Where?

Talks at the **end** of the semester



Time and Place

- When?** We pick the slot
- ① With the least collisions
 - ② Most comfortable for you

- Where?** Talks at the **end** of the semester
Seminartagungsstätte Frauenchiemsee
Disclaimer: Only if participants show interest!
Fallback: On-campus conference

Grading

| | |
|------|----------------------------------------------------|
| 40 % | Final Paper (Content, Style, Language, Scope, ...) |
| 10 % | Practical application (depends on topic) |
| 10 % | Review |
| 30 % | Presentation (Content, Style, Timeliness, ...) |
| 10 % | Discussion |

Σ 100 % Total

Questions?

Contact us at
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https://www.sec.in.tum.de/i20/teaching/ss2022/copy2_of_software-security-analysis