

Reverse Engineering — Summer 2018

Seminar

Julian Kirsch

Lehrstuhl für Sicherheit in der Informatik / I20
Prof. Dr. Claudia Eckert
Technical University of Munich

29. January 2018

"Block" Seminar

When? **Wednesday**, 12:00 - 14:00
01.08.033

Talks at the **end** of the semester

Where?



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Where? Seminartagungsstätte Frauenchiemsee
Disclaimer: Only if participants show interest!
Fallback: Room 01.08.033

Registration

- ▶ Registration using the **matching system**
- ▶ Solve a **reverse engineering challenge** instead (details on the course website).
- ▶ **Warning:** This semester we are dealing with real malware
- ▶ Submit a report about the analysis process and (optionally) a project proposal
- ▶ Submit your solution via e-mail no later than **2018-02-14, 00:00**.
- ▶ PGP-Fingerprint:
F949 CFBD 140A 6DD0 71E9 0B8C DC24 396B 6D45 1038
- ▶ **8** slots (**FCFS** if I really have to, i.e. `solvecount > 8`)

Process

- ▶ Phase **I**: Find 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**: (Excursion &) Final **talks**

Process

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- ▶ Phase **IIX**: **New**: Submission to ROOTS 2018

Exact schedule will be published once list of participants is known.
(Excursion is supposed to happen around end of the lecture period.)

Contents

- ▶ **Malcode** analysis
 - ▶ (de-)obfuscation
 - ▶ (un-)packing of binaries
 - ▶ ...
- ▶ **Static** analysis techniques
 - ▶ disassemblers
 - ▶ decompilers
 - ▶ symbolic execution
 - ▶ ...
- ▶ **Dynamic** analysis techniques
 - ▶ (anti-)debugging
 - ▶ symbolic execution
 - ▶ instrumentation
 - ▶ ...
- ▶ ...your (scientific) suggestion here

Questions?

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Qualification task download provided via the course webpage.