

Privacy-Enhancing Technologies



TECHNISCHE
UNIVERSITÄT
DARMSTADT

WS 2018/19

3 CP

Introduction, organization of the course

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Security Engineering Group

Technische Universität Darmstadt

<http://www.seceng.de/pets18>



Organization

- Mixture of lectures and practical work (3CP)
 - Lectures: Introduction to topic; additional reading material provided
 - Practical work:
 1. Summarizing one research paper in first two weeks
 2. Practical projects in groups of 3-4 students

- Grades will be based on the results of the practical projects + paper summary

- More information can be found on our web page:
<http://www.seceng.de/pets18>
- Lecture slides & assignments on Moodle:
<https://moodle.informatik.tu-darmstadt.de/course/view.php?id=531>

Schedule

Lectures

(Wednesday 09.50–11.30, Room S202/C110)

October 24:	Anonymous communication
October 31:	Cryptographic protection of sensitive data
November 21:	Database privacy
November 28:	Identity management
December 12:	Location privacy

Deadlines

November 4:	Submission of paper summary
November 11:	Topic assignment request
March 3:	Submission of practical work
<u>Presentation of practical work:</u>	March (to be announced)

Paper assignment in the first two weeks (1)

- A link to list of papers is on our web site:
<http://www.seceng.de/pets18>
- Pick a topic and a paper of your choice:
 - Privacy in mobility and transportation data
 - Automotive security and privacy
 - Hardware-based solutions for vehicular security
 - Privacy in satellite map view data
 - User tracking over hardware side channels
 - User tracking over acoustic radar
 - Embedded cryptography
 - Multi-user secure storage
 - ...

Paper assignment in the first two weeks (2)

- Summarize the paper in one page!
 - Structure: Introduction & motivation (min. 1/3), Approach & main results (min. 1/3)
 - Layout: [IEEE Conference double column](#)
 - Deadline: November 4
- Submit the paper through [Moodle](#) (preferred)
 - Alternatively, by e-mail to [Nikolay Matyunin](#), add [pets18summary], paper number and your name to the e-mail subject

Hints:

- Individual work in this phase!
- This is not a classic seminar paper (no abstract, related work, etc.)
- You do not need to communicate about your choice beforehand

Practical projects (1)

- Form **groups of 3–4 people**
- Inform [Nikolay Matyunin](#) via e-mail about
 - group members
 - 5 preferred topics in order (1st — most preferable, ...)
 - one e-mail per group, members in CC
- Add **[pets18project]** to the email subject
- Deadline: November 11

```
[...]  
wir haben uns zu folgender Gruppe zusammengefunden:  
* Max Mustermann, mailmenot@example.com  
* Sabine Musterfrau, sabine@mailmenot.com  
* Donald Trumpf, mr.trumpf@hotmail.com  
* Hillarious Klinton, ms.klinton@yahoo.de  
Unsere 5 Wunschthemen sind:  
T5, T1, T3, T7, T9  
[...]
```

Hints:

- Apply only after all of you submitted the paper summary!
- Unfortunately, we cannot guarantee topics by preference
- If you cannot find a group (or enough members), please also register via e-mail. We will form (fill up) groups with the remaining students

Practical projects (2)

1st mandatory meeting: mid of November

- After you received an email about your assignment, contact your topic supervisor by e-mail to arrange the first meeting!
- Read the background papers and related work, if provided in the slides

- **Further mandatory meetings are to be set by your supervisor**

Grading

- Grades for attendees will be based on the results of the practical work including presentation (85%) and paper summary (15%)
- Every group presents their practical assignments
 - Good quality of the talk is essential
 - Duration of the talk is **12 min**; followed by 3min. of discussion
 - The slides and the talk can be in either German or in English