Seminar: Inverse Transparency
Introductory Meeting

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Data hogs in our lives

You: “Just use something else!”

Other people: “But it’s so useful...and I have nothing to hide!”

You: “You never know what information can be inferred from the data and how it will be (mis)used against you. Also, the fear of potentially being surveilled might restrict you in articulating what you really think, which in turn infringes your right to free expression and your right to be let alone.”
Data hogs at our employers

Theory

- Technologies with reasonable use-cases
- Managers mustn't misuse employees' personally identifiable data.

Reality

- Information and power asymmetry
- Burden of proof: Employee

"I didn’t fire you because of your performance data..."

Source: Welt
Inverse Transparency – The concept

Why Inverse Transparency?

▶ Misusage happens – we can try to make it unattractive
▶ At the same time allow legitimate and interesting data usages

What is Inverse Transparency?
In short: A new approach to data privacy.

▶ Grant full/legitimate access to personal data to everyone, *but*...
▶ ...make all data usages visible (transparent).
Seminar topics (selection)

Maintaining data privacy on access

▶ Are existing privacy languages sufficient for data privacy at the workplace?
▶ Applicability of existing privacy (nutrition) labels to the concept of Inverse Transparency

Usable Inverse Transparency

▶ Designing an Inverse Transparency dashboard to support employees’ collective actions.

Inverse Transparency for cloud infrastructures

▶ Difference in the deployment of Inverse Transparency depending on distinct deployment and service models
▶ Developing a trusted Inverse Transparency infrastructure for cloud

Understanding the threat

▶ An investigative data science approach to what GitHub reveals about developers
▶ Developing a taxonomy for data sources and data usages at the workplace
Seminar topics: A note

▶ Additional topics will arise

▶ You may also suggest fitting topics
What you will learn

▶ Literature topics
  ▶ Conducting a literature review
  ▶ Summarizing and classifying literature

▶ Implementation topics
  ▶ Grounding your implementations in science
  ▶ Empirically evaluating your software

▶ Writing a scientific paper

▶ Peer reviewing

▶ Presenting your results
Administrative (1/2)

- Bachelor’s and master’s seminar
- Three seminar meetings over the course of the semester
  - Kick-off
  - Intermediate meeting
  - Seminar itself (presentation session) is held in a block of 1–2 days
- Dates will be announced in a timely manner
  - Meetings at beginning and middle of the semester
  - Presentations in the last week of the semester
Administrative (2/2): Application

- Registration via https://matching.in.tum.de/
- Apply via our application form (link on the seminar homepage) to get prioritized

Seminar homepage:

Application form:
https://wiki.tum.de/display/i4students/Application+for+Seminar+Inverse+Transparency

http://go.tum.de/364641

http://go.tum.de/105091
## Our other seminars & practicums

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<td>• Automotive Software Engineering</td>
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★ Our premier seminar!

• Industry internship position required

Find all our courses here: [https://www.cs.cit.tum.de/en/sse/teaching/]
Any questions?
Backup slides
Deliverables

- Seminar paper
  - Intermediate submission (2-page extended abstract)
  - Final submission

- Peer review of 3 other papers

- Presentation & discussion