

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



PROGLOVE



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..."

WIRTSCHAFT URTEIL

Kassiererin wegen 1,30 Euro gefeuert

Veröffentlicht am 24.02.2009 | Lesedauer: 3 Minuten

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:

<https://www.cs.cit.tum.de/sse/en/teaching/seminar-inverse-transparency/>



<http://go.tum.de/364641>

Application form:

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



<http://go.tum.de/105091>

Our other seminars & practicums

Type	Title	Pre-meeting
Seminar	Software Quality ★	20.07., 11:00
	Trend Seminar CDTM (<i>CDTM only</i>)	—
Practicum	Advanced Testing of Deep Learning Models	18.07., 15:00
	Introduction to Model-based System Engineering	19.07., 11:00
	Web-Visualisierung von Netzwerkgraphen (<i>German</i>)	20.07., 14:00
	• Automotive Software Engineering	—

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- 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