



UNIVERSITÄT  
PADERBORN



EXERCISE: GENERAL PRIVACY CONCEPTS & K-ANONYMITY

# PRIVACY AND TECHNOLOGY (PaT)

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# Reminder

## Reading groups

- Necessary to get Course Achievement (for the final exam)
- Book a slot on PANDA and choose a paper
- If your exercise group is booked out, choose the other one
- Deadline: 27<sup>th</sup> October
- Submission: Thursday before your presentation (on PANDA)

*Exam and CA registration now open in PAUL!*

# CA Grading

## **Analysis:**

- Template on PANDA (Don't just fill it out! No bullet points!)
- Write a report covering all aspects from the template

## **Summary:**

- 1-2 pages, covering main ideas: problem and related work, methodology, results, limitations & future work

## **Presentation:**

- Every member of the group should present!
- 20 minutes + max. 15 minutes of discussion

# How to analyse

„Analysis Template“ provided in PANDA

## Paper idea

- What is the field of research?
- What is the problem the paper tries to solve?
- What is the exact research question?
- What is the paper hypothesis?
- How **relevant** is this research?



<b>Survey</b>	Title, Author(s)
	Field of Research
	Exact problem domain
Content	Assumptions / Definitions

<b>Paper</b>	Title, Author(s)
	Field of research
	Exact research question
	Relevance (Claim)
	Hypothesis

Content	Assumptions
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Critical ac	Shortcomings
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# How to analyse

„Analysis Template“ provided in PANDA

## Paper content

- What are the *assumptions* of the paper?
- Which definitions are contained?
- What is the idea for solving the problem?
- How is the evaluation carried out? Does it suffice to demonstrate/substantiate the claims?

Survey	Title, Author(s)
Field of Research	
Exact problem domain	
Content	Assumptions / Definitions

  

Paper	Title, Author(s)
Field of research	
Exact research question	
Relevance (Claim)	
Hypothesis	
Content	Assumptions
	Definitions
	Overview of solutions
	Evaluation style, procedure, results
Critical acclaim	Merits
	Shortcomings

# How to analyse

„Analysis Template“ provided in PANDA

## Critical Acclaim

- What are the merits?
- What are the shortcomings?

Survey	Title, Author(s)
Field of Research	
Exact problem domain	
Content	Assumptions / Definitions

Paper	Title, Author(s)
Field of research	
Exact research question	
Relevance (Claim)	
Hypothesis	
Content	Assumptions
	Definitions
	Overview of solutions
	Evaluation style, procedure, results

Critical acclaim	Merits
	Shortcomings

# Today's Outline

- Quiz: General Privacy Background
- Coding & Thinking: Practicing with k-Anonymity

# Quiz: General Privacy Concepts



Socrative URL:

<https://api.socrative.com/rc/ccmsmp>

(Room name: P34TZ)





# Practicing with k-Anonymity

## Learning Goal

- Learn about the k-Anonymity concepts and problems hands-on using Python
- Apply methods and implement practical solutions

## Tasks

- Download material from PANDA, follow instructions
- Solve the problems and answer questions

## Resources

- Open source book: Near, Joseph P. and Abuah, Chiké. (2021) "Programming Differential Privacy". (Vol.1.)
- Adults with incomes dataset: <http://www.cs.toronto.edu/~delve/data/adult/desc.html>