Seminar on Privacy in Ubiquitous Computing

Mehmed Mustafa

Institute of Computer Science
University of Göttingen
mehmed.mustafa@stud.uni-goettingen.de

Chris Warin

Institute of Computer Science
University of Göttingen
chris.warin@stud.uni-goettingen.de

Abstract—This document is a model and instructions for \LaTeX . This and the IEEEtran.cls file define the components of your paper [title, text, heads, etc.]. *CRITICAL: Do Not Use Symbols, Special Characters, Footnotes, or Math in Paper Title or Abstract.

Index Terms—component, formatting, style, styling, in-

I. Introduction

This document is a model and instructions for L^AT_EX. Please observe the conference page limits.

II. BYSTANDERS' PRIVACY PERVASIVENESS

Give real-life examples and why they are problematic.

A. Videos and images

Surveillance cameras, smartphone photos/videos in the street capturing bystanders

B. Audio

Google Home / Amazon Alexa in a household: other members are also listened

C. Location

Pervasive location information in apps (e.g. French StopCovid app recenses more contacts' location information than announced)

D. Others

IoT, see example in 2.b

III. TECHNOLOGIES FOR ENSURING THE PRIVACY OF BYSTANDERS

A. PriSurv Framework

Reference [1]

B. Sharing of Multi-Subject and Interdependent Data Reference [2]

C. Cardea Framework

Reference [3]

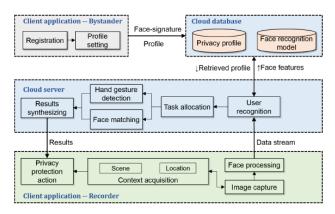


Figure 1. Cardea framework overview.

- D. Others More specific Audio or Location based technologies should be found
 - IV. LIMITATIONS AND CHALLENGES OF PRIVACY
 ENSURING TECHNOLOGIES

A. Cardea (user contribution)

Willingly putting your personal data on a cloud to avoid having your privacy invaded by others can be seen as counter productive

- B. Example 2
- C. Example 3
- D. (optionally) Ideas that could fix these limitations

V. CONCLUSION

Table I
TABLE TYPE STYLES

Table	Table Column Head		
Head	Table column subhead	Subhead	Subhead
copy	More table copy ^a		
^a Sample of a Table footnote.			

REFERENCES

Please number citations consecutively within brackets [3]. The sentence punctuation follows the bracket [4]. Refer simply to the reference number, as in [5]—do not

use "Ref. [5]" or "reference [5]" except at the beginning of a sentence: "Reference [6] was the first ..."

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Unless there are six authors or more give all authors' names; do not use "et al.". Papers that have not been published, even if they have been submitted for publication, should be cited as "unpublished" [6]. Papers that have been accepted for publication should be cited as "in press" [2]. Capitalize only the first word in a paper title, except for proper nouns and element symbols.[7]

For papers published in translation journals, please give the English citation first, followed by the original foreign-language citation [2].

REFERENCES

- N. Chinomi and B. Ito, "Prisurv: Privacy protected video surveillance system using adaptive visual abstraction," in *Advances in Multimedia Modeling*, pp. 144–154, 2008.
- [2] A.-M. Olteanu, K. Huguenin, I. Dacosta, and J.-P. Hubaux, "Consensual and privacy-preserving sharing of multi-subject and interdependent data," in *Proceedings of the 25th Network and Distributed System Security Symposium (NDSS)*, pp. 1–16, Internet Society, 2018.
- [3] J. Shu, R. Zheng, and P. Hui, "Cardea: Context-aware visual privacy protection from pervasive cameras," arXiv preprint arXiv:1610.00889, 2016.
- [4] F. Dufaux and T. Ebrahimi, "A framework for the validation of privacy protection solutions in video surveillance," in 2010 IEEE International Conference on Multimedia and Expo, pp. 66–71, IEEE, 2010.
- [5] T. Denning, Z. Dehlawi, and T. Kohno, "In situ with bystanders of augmented reality glasses: Perspectives on recording and privacymediating technologies," in *Proceedings of the SIGCHI Conference* on Human Factors in Computing Systems, pp. 2377–2386, 2014.
- [6] Y.-H. Lu, A. Cavallaro, C. Crump, G. Friedland, and K. Winstein, "Privacy protection in online multimedia," in *Proceedings of the* 25th ACM international conference on Multimedia, pp. 457–459, 2017
- [7] S. Aditya and O. Druschel, "I-pic: A platform for privacycompliant image capture," 2016.