

Offlinetags@CLT: Social Signals Meet Technical Communities (WIP)

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1 Introduction

In (semi-) public events like conferences and conventions, there are diverse and potentially conflicting interests in taking and publishing photos. While crowd pictures demonstrate a lively event, the processing of such photos affects individuals' privacy. Beyond the legal dimension, i.e. having a legal basis for processing personal data, organizers often try to accommodate individual photo preferences. A common example are lanyards in two colors, indicating either "no photos" or acceptance of photos being taken and published. However, lanyards have two major drawbacks: (1) they only allow binary expression, while individuals have more nuanced preferences [2, 4, 5], and (2) they cannot be processed automatically (e.g. by smart cameras, or in post-processing). Hence, related work proposes social and machine-readable tags allowing for more nuanced communication of preferences [1, 3].

One approach to communicate the individual's photo preference are the Offlinetags [3], a social signal that covers both photo taking and publishing, consisting of four symbols: no photos, blur me, upload me, and tag me (Figure 1). However, it has not yet been evaluated whether different stakeholders have a demand for such a social signal and, subsequently, would be willing to use the proposed solution. Hence, we designed the first empirical study on the Offlinetags. In particular, we examined the following research questions:

RQ1: Is there a demand for social signals?

RQ2: Are the Offlinetags meeting the demand?

RQ3: If so, are they used according to the demand?



Figure 1: The four Offlinetags

2 Method

We designed a mixed method study, carried out at the Chemnitzer Linux-Tag (CLT) 2026, a convention of the technical open-source community with attendees with conflicting interests, as it connects different stakeholders, including visitors, exhibitors, and media. On March 28 and 29, 2026, there have been 3800 attendees at the CLT.

2.1 Setup

In practice, the Offlinetags were provided as a set of cardboard buttons (with needles) with separate cardboard symbols. This way, we balanced costs and sustainability. The cardboard symbols had a diameter of 5 cm. The materials were provided by the CLT organization as part of the convention experience in line with the theme "sovereign digitality". Overall, each of the symbols was available 1000 times. To facilitate the selection process, we pre-assembled ~ 200 pieces per symbol.

The Offlinetags were issued from a booth in the entrance area of the main convention hall. CLT attendees could freely choose if they want a tag or also decide to not wear any Offlinetag. The booth also offered information materials and was occupied by at least one researcher at all times. Attendees were informed about the Offlinetags in the three days before the event through the CLT channels (newsletter, social media), in the entrance queue and at the booth.

2.2 Study Design

The study consisted of four independent but connected parts:

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Pre-Study. In a pre-study, we were interested in the general demand for a social signal before attendees were informed about the Offlinetags. Therefore, this study was available online and filling out the questionnaire took less than 5 minutes. Participants were recruited through the CLT channels and in the entrance queue on day one.

Short Interviews. During the event, we asked attendees for a short semi-structured interview of 5 minutes to learn why they have (not) decided for a specific tag.

Long Interviews. To get more in-depth understanding, we conducted long interviews (30 minutes) focusing on the relation of privacy attitudes and Offlinetag usage and to get feedback on design and format of the buttons.

Post-Study. In the month after the CLT, we conducted another online survey (15–20 minutes), aiming to evaluate the effect of the Offlinetags on the event experience.

2.3 Ethical Considerations

We followed our Universities’ ethical guidelines. In particular, we checked with the University of Salzburg guidelines¹ that formal ethics approval was not required, in particular because all studies were targeting adults, were voluntary and anonymous and we recorded all interviews by hand without any AI software. According to the university guidelines, we obtained informed consent and adhered to standard procedures for secure and responsible data management.

3 Preliminary Results

To address RQ1, we present first findings from the pre-study, and the short interviews are used for a first intuition towards RQs 2 and 3. A detailed analysis of these short interviews, the long interviews and the post-study is ongoing.

3.1 Pre-Study

From 179 participants, 159 met the participation criteria and completed the survey. As the survey targeted the CLT community, the sample is biased towards males (76.1 %) between 36 and 45 years (32.7 %). From this sample, 71.7 % would like to have a social signal for photo preferences as photo subjects and 60.5 % from the perspective of photographers. Interestingly, participants were more concerned about photos from peers than photos by official photographers. As photos for personal usage are not forbidden by data protection law, this finding highlights the need for a solution for communicating photo preferences beyond legal consent.

¹The criteria list from the ethics commission can be found under <https://www.plus.ac.at/service/uni-administration/gesamtuniversitaere-gremien/ethikkommission/> [in German]

3.2 Short Interviews

During the event, we observed that only a minority of people wore an Offlinetag, with more than half indicating they are fine with photos. We approached attendees for short semi-structured interviews, aiming for a balanced sample of tag variants and non-tag users as well as different stakeholders. We conducted 111 interviews in person. After first qualitative content analysis, guided by our research questions, there were the following recurring themes:

General feedback. Overall, the feedback was largely positive, with the main aspect being that the Offlinetags improve the status-quo by offering more than just opt-out options, allowing individual decisions and reducing the effort of communicating and negotiating preferences between photographers and visitors.

Reasons to use a specific tag. The “Tag me” button was used by both exhibitors and visitors, because presence at the CLT was perceived as beneficial for networking and/or business, and people were particularly proud of being part of the community. In this line, people choosing an “Upload me” button highlighted their trust in the Linux community, where people are supposed to handle the photos carefully. Another reason for this tag was that the burden for the photographers should be lowered, some visitors did not want to be the reason for not taking a photo forcing post-processing. Under similar considerations, people with a “Blur me” buttons would prefer not to be on photos but at the same time do not want to prevent photos, leading to the compromise of blurred photos. Others wanted this tag to start a conversation or just see how the blurring is done. People with a “No photos (please)” tag primarily feared the loss of control over the own image and AI misuse. They highlighted the increased awareness of privacy issues with photos through the Offlinetags.

Reasons not to wear a tag. The majority of CLT attendees wore no Offlinetag. Besides people that simply did not notice the offer, people also consciously decided against a tag due to principled and practical reasons. For them, the previously mentioned themes of trust in the Linux community and visibility and a good image — particularly among exhibitors — made the tag feel unnecessary. On a practical level, some avoided pin-back buttons over concerns that this will damage their clothing.

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References

- [1] Shimon Machida, Adrian Dabrowski, Edgar Weippl, and Isao Echizen. Privacytag: A community-based method for protecting privacy of photographed subjects in online social networks. In Arpan Kumar Kar, P. Vigneswara Ilavarasan, M.P. Gupta, Yogesh K. Dwivedi, Matti Mäntymäki, Marijn Janssen, Antonis Simintiras, and Salah Al-Sharhan, editors, *Digital Nations – Smart Cities, Innovation, and Sustainability*, pages 261–275, Cham, 2017. Springer International Publishing.
- [2] Yuqi Niu, Nicole Meng-Schneider, Weidong Qiu, and Nadin Kokciyan. “i am not the primary focus” - understanding the perspectives of bystanders in photos shared online. In *Proceedings of the 2025 CHI Conference on Human Factors in Computing Systems*, CHI ’25, New York, NY, USA, 2025. Association for Computing Machinery.
- [3] Frank Pallas, Max-Robert Ulbricht, Lorena Jaume-Palásí, and Ulrike Höppner. Offlinetags: a novel privacy approach to online photo sharing. In *CHI ’14 Extended Abstracts on Human Factors in Computing Systems*, CHI EA ’14, page 2179–2184, New York, NY, USA, 2014. Association for Computing Machinery.
- [4] Yasuhiro Tanaka, Akihisa Kodate, Yu Ichifuji, and Noboru Sonehara. Relationship between willingness to share photos and preferred level of photo blurring for privacy protection. In *Proceedings of the ASE BigData & SocialInformatics 2015*, ASE BD&SI ’15, pages 1–5, New York, NY, USA, 2015. Association for Computing Machinery.
- [5] Vincent Toubiana, Vincent Verdot, Benoit Christophe, and Mathieu Boussard. Photo-tape: user privacy preferences in photo tagging. In *Proceedings of the 21st International Conference on World Wide Web*, WWW ’12 Companion, page 617–618, New York, NY, USA, 2012. Association for Computing Machinery.