

TESTIMONY OF ROBERT SHERMAN
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HEARING ON WHAT FACIAL RECOGNITION TECHNOLOGY MEANS
FOR PRIVACY AND CIVIL LIBERTIES

BEFORE THE PRIVACY, TECHNOLOGY AND THE LAW SUBCOMMITTEE
OF THE SENATE COMMITTEE ON THE JUDICIARY

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Chairman Franken, Ranking Member Coburn, and Members of the Committee, my name is Robert Sherman, and I am the Manager of Privacy and Public Policy at Facebook. Thank you for the opportunity to share Facebook's views on what the increasing use of facial recognition technology means for the American people. Facebook is committed to building innovative tools that enhance people's online experiences while giving them control over their personal information. Our integration of facial recognition technology into tag suggestions on Facebook exemplifies this commitment, and I look forward to discussing with you the privacy and security protections that we have built into this feature.

At Facebook, we understand the importance of continuing to build innovative technologies that help people communicate and share in a way that honors and preserves the trust that they have placed in us. Indeed, we believe that our success as an innovator is largely due to the work that we do every day to build and maintain people's confidence that we will be good stewards of their data.

In my testimony today, I will first describe the important user controls that we include in our tag suggestions feature. Second, I will address the steps we take to safeguard the data we maintain in connection with tag suggestions.

I. Facebook's Photo Management Tools, Including Tag Suggestions, Were Designed With Privacy at the Forefront

At Facebook, we implement facial recognition technology in our popular and innovative tag suggestions tool, which helps users manage and share their photos. In the early days of Facebook, we learned how important photo sharing was to our users when we realized that people were frequently changing their profile photos to show friends their most recent snapshots. In response to that feedback, in 2005 we built a feature that allowed people to upload and share photos on Facebook, and we have continued building those features ever since. One

component of our photo management and sharing features is photo tagging, which is the 21st century's version of handwriting captions on the backs of photographs, and it allows users to instantaneously link photos from birthdays, vacations, and other important events with the people who participated. To help our users more efficiently tag their friends in photos, we built tag suggestions, which uses facial recognition technology to suggest people they already know and whom they might want to tag. In recent years, other companies have begun using facial recognition technology as well, and many photo management services incorporate tools similar to ours. Today, photo sharing is so popular on Facebook that as many as 300 million new photos are uploaded to our service each day. To keep up with that demand, a few months ago we took our tag suggestions feature down to improve its efficiency. We plan to restore the feature to our site soon.

To understand how tag suggestions work, and how we designed the feature to protect our users' privacy, it helps to have a general understanding of the core tools and controls we provide to help people organize and share their photos.

A. Photos and Tagging on Facebook

Facebook's photo management tools are among the most popular features on our service in large part because they build upon things people could always do with their photos — such as placing them in albums and adding captions — by making photos more social. The key to making photos social on Facebook is our “tagging” feature. On Facebook, a “tag” is a special link that can be used to associate a photo with a particular user's page on Facebook, which we call a “timeline,” and, depending on the person's privacy settings, share that photo with others. The popularity of tagging is no doubt due to the social interaction it encourages. Tags also help promote transparency and control on Facebook because when a person is tagged, by default Facebook lets that person know. This allows the person included in the photo to interact with the

user who uploaded it or to take action if he or she does not like the photo, such as removing the tag or requesting that the photo be removed entirely. And the photo may be shared with others (again, depending on privacy settings), who may “Like” or comment on the photo.

Another reason why photos and tagging are such popular features on Facebook is the fine-grained privacy controls built into those tools. For example:

- Inline privacy controls. When people share photos on Facebook, our inline audience selectors enable them to determine with precision the audience with whom the photos will be shared. These controls are presented at a time and in a way that allows a person to make a meaningful decision about her photos when he or she is posting them.
- Tag review. Tag review allows people to pre-approve stories where they are tagged before they appear on their timeline.
- Tag removal. A person can “untag” a photo in which she appears, thereby unlinking it from her account.
- Blocking. Facebook’s privacy settings allow people to “block” others who tag them in photos. Blocking prevents the blocked person from tagging the person again in photos.
- Reporting. Photos on Facebook contain a “Report” link, which enables people to request removal of objectionable photos. Through this link, a person can easily contact the person who posted the photo to make a deletion request or refer the photo to Facebook for professional review.

As with all our products and services, we constantly strive to make our photo management tools more responsive to the needs of people who use Facebook. After we introduced tagging, many people told us that the feature was useful but that manually entering tags for each person in every photo required a great deal of time and effort. We developed tag suggestions in response to this feedback.

B. Tag Suggestions

Tag suggestions automate the process of identifying and, if the user chooses, tagging friends in the photos he or she uploads. Convenience features like this, which are

designed to automate tools, are common with online services and often greatly enhance everyone's experience – especially with popular products like photo sharing. Tag suggestions works by determining what several photos in which a person has been tagged have in common and storing a summary of the data derived from this comparison in a file that we call a “template”. When a person uploads a new photo, we compare that photo to the summary information in the templates of the people on Facebook with whom the person communicates most frequently. This allows us to make suggestions about whom the user should tag in the photo, which the user can then accept or reject.

Tag suggestions has been enthusiastically embraced by millions of people on our service because it is convenient and the uploader is in control of their photos. We recently acquired Face.com, the company from which we licensed the technology that we use to operate tag suggestions. The engineers who worked at Face.com are working with us to improve the efficiency of our tag suggestion systems. In the interim, we are working to wind down Face.com's operations.

When we first designed tag suggestions, we considered how to implement the technology in a way that would respond to people's demand for better tagging tools without diminishing their ability to control the collection, use, and disclosure of their information. We launched the feature with several important privacy protections.

First, we are transparent about our use of the technology. Our Data Use Policy¹ contains a clear and concise explanation of tag suggestions and links to a series of frequently

¹ See https://www.facebook.com/full_data_use_policy.

asked questions in our Help Center,² which describes how tag suggestions work and how people can control the feature.

Second, tag suggestions only use data people have voluntarily provided to Facebook — photos and the tags people have applied to them — and derives information from that data to automate the process of future tagging. We do not collect any new information beyond the photos themselves in order for tag suggestions to work. In this regard, tag suggestions are similar to the recommendations offered by popular sites such as Amazon and Netflix. Like those services, tag suggestions simply takes data that people have provided and uses that data to make helpful, time-saving predictions about how people may want to use our site. Unlike implementations of facial recognition that rely on the direct collection of data from people with whom the collector has no preexisting relationship, the people who provide the data that powers tag suggestions have established relationships with Facebook and choose to use our service because they want to share information about themselves in a safe and controlled way.

Third, Facebook’s technology does not enable people to identify others with whom they have no relationship. Tag suggestions simply use a list of a person’s friends who have been tagged in other photos and suggests which of those friends might be in the photos she uploads. Facebook’s technology is not designed to search for random strangers – rather, it is optimized to help you automate the tagging of the people in your photos so you can share those photos with them.

Fourth, and perhaps most importantly, Facebook enables people to prevent the use of their image for facial recognition altogether. Through an easy-to-use privacy setting, people can choose whether we will use our facial recognition technology to suggest that their friends tag

² See <https://www.facebook.com/help/tag-suggestions>.

them in photos. If a person chooses not to allow this, as we explain on our website: “When you turn off tag suggestions, Facebook won’t suggest that friends tag you when photos look like you. The template that we created to enable the tag suggestions feature will also be deleted.”³

Facebook’s tag suggestions feature, unlike other facial recognition products, is based specifically on individual control. It makes suggestions based on the networks that people have formed expressly on Facebook, rather than seeking to identify unknown people. And it further empowers people to control the experience, even within those expressly created networks, by notifying them when they are tagged and giving them a range of choices about how information derived from that tag will be used.

II. Facebook Provides Strong Safeguards for the Data Used For Tag Suggestions

In addition to providing appropriate privacy controls, Facebook has implemented strong technical and procedural safeguards for the personal information we store, including the templates used to power tag suggestions. We encrypt these templates as they are stored on our servers and limit the ability of people within Facebook to access this information.

In addition, the nature of our technology, federal law, and our internal policies restrict the facial recognition data we disclose to third parties, including law enforcement. Two aspects of our unique technology severely limit its usefulness to law enforcement agencies. First, our templates work only with our proprietary software. Alone, the templates are useless bits of data. Second, our software cannot be used to compare a photo of an unknown person against our database of user templates. Our technology is designed to search only a limited group of templates — namely, an individual user’s friends — and law enforcement agencies accordingly cannot use our technology to reliably identify an unknown person.

³ <https://www.facebook.com/help/?faq=187272841323203#How-can-I-turn-off-tag-suggestions?>

Moreover, as we describe in our Law Enforcement Guidelines⁴ — we are one of only a handful of major Internet companies to post them online — Facebook has implemented rigorous procedures meant to ensure that information is shared with law enforcement only in very limited circumstances pursuant to applicable law. As we describe on our website, we disclose account records solely in accordance with our terms of service and applicable law. Indeed, a dedicated team of professionals scrutinizes each request for legal sufficiency and compliance with Facebook’s internal requirements, and we regularly oppose requests that we believe violate the law. Our Data Use Policy also provides the ability to share information with law enforcement in emergency situations including risk of death or bodily harm. Such situations are rare, and we take very seriously the commitments we have made to people who use Facebook in our Data Use Policy.

III. Conclusion

I hope that my testimony today has helped the Members of this Committee understand how Facebook uses facial recognition technology and, more importantly, the privacy and security protections that define our implementation of the technology. The tools we create to enable people to share information with friends and family — and the innovative ways in which we let users control their information — will no doubt continue to evolve. But our fundamental commitment to protect the privacy and security of the people who use Facebook will not change. We look forward to continuing our dialogue with you on this important subject.

Thank you for the opportunity to testify today. I look forward to answering any questions you may have.

⁴ <https://www.facebook.com/safety/groups/law/guidelines/>.