

A physical party to prove you're a real virtual person

March 31 2021



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The ease of creating fake virtual identities plays an important role in shaping the way information—and misinformation—circulates online. Could 'pseudonym' parties, that would verify proof of personhood not proof of identity, resolve this tension?

Social media platforms have completely changed the way information

flows online. While these platforms offer many benefits, the anonymity that social media enables, combined with the ease of creating numerous accounts, can also lead to the spread of misinformation, conspiracy theories and the distortion of political discourse.

One response is that we should simply jettison anonymity and require that all accounts be linked to a verified identity, but anonymity is an important part of freedom of expression online, making this an undesirable solution. Now, Professor Bryan Ford, from the School of Computer and Communication Sciences (IC) has developed an idea of using in-person events, which he calls "pseudonym parties," to reconcile online anonymity with accountability, a challenge explored [in an article](#) by EPFL's International Risk Governance Center (IRGC), co-authored by its deputy director Aengus Collins.

While technological problems tend to require technological approaches, this is instead a relatively analogue idea. These events would be held on a regular basis, say once a month or once a year, and offer a digital token that provides "proof of [personhood](#)." These digital tokens would not have any identifying information but would prove that the person attached to the token is somebody real who showed up to a certain place at a certain time. They could then be used to verify personhood online on [social media](#).

"This would contribute to accountability in a few ways," said Professor Ford. "For one, it would address the problem of online abuse magnification, because even if one user created multiple accounts, 'likes' or 'shares' from all of those accounts would count only once. In addition, if this person did something abusive on one of their channels, any accounts associated with their 'personhood' would be sanctioned."

"Accounts based on proof of personhood, while still anonymous, would no longer be easy to replace, with sanctions against abusive accounts

becoming more effective and abusers no longer able to amplify their rhetoric by creating numerous fake accounts," added Collins.

Of course, in-person events have logistical challenges. In order to prevent people from obtaining multiple tokens for themselves or to sell, these events would have to be simultaneous so that people could only attend one each cycle. There would also need to be strong transparency and accountability in the organization of these parties, so that facilitators cannot inflate attendance numbers and keep extra tokens for themselves.

As the events would, at least initially, be locally and independently organized, measures would have to be in place so that different groups would recognize each other's tokens. In addition, the digital tokens would have to expire, so that people couldn't accumulate usable tokens cycle after cycle. And there would also need to be a remote option for people unable to participate in person, due to work conflicts or a disability, for example.

Ford says that despite these challenges, based on his research, the approach is still the optimal way to establish proof of personhood online. "There are other ways, such as with government-issued biometrics, or by relying on participants in a digital network to attest to the validity of their connections' personhood. However, of the four key goals for proof of personhood I set out—equality, inclusivity, privacy and security—preliminary analysis suggests that only pseudonym parties appear capable of achieving all four."

The proposal of pseudonym parties brings up a number of important questions, such as who would be in charge of organizing and managing these events, and would they eventually become mandatory? While they would start small and local, how would they scale up? In addition, how would big tech companies and [social media platforms](#) be involved so that these digital tokens actually mean something online?

While there are clearly implementation issues to overcome, Ford and Collins see it as a compelling idea that may drive further momentum to deal with these issues.

More information: Using 'proof of personhood' to tackle social media risks, [www.epfl.ch/research/domains/i ... -social-media-risks/](http://www.epfl.ch/research/domains/i...-social-media-risks/)

Identity and Personhood in Digital Democracy: Evaluating Inclusion, Equality, Security, and Privacy in Pseudonym Parties and Other Proofs of Personhood, arXiv:2011.02412v1 [cs.CY]
arxiv.org/abs/2011.02412v1

Provided by Ecole Polytechnique Federale de Lausanne

Citation: A physical party to prove you're a real virtual person (2021, March 31) retrieved 5 May 2024 from <https://techxplore.com/news/2021-03-physical-party-youre-real-virtual.html>

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