

Call for Contributions

Inform the Chair: with the Title of your Contribution

Submission URL:

<https://www.iariasubmit.org/conferences/submit/newcontribution.php?event=ICONS+2017+Special>

Please select Track Preference as **WECPE**

Special track

WECPE: Civilian Privacy vs. Wearables and Embeddables

Chair and Coordinator:

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along with

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Wearable, embedded technology is permeating every aspect of our lives. Fitness trackers, ‘smart’ watches and even in-body medical devices are rapidly transforming the way we work, rest and play, 24 hours a day. Much of this innovation is made possible through the availability of increasingly sophisticated and rapidly shrinking embedded components being connected to the cloud and to each other via abounded cheap bandwidth.

The world is embracing this opportunity with gusto: it is estimated that by 2020 the wearable market will grow to \$37 billion. However while the world embarks on an enthusiastic gold-rush to be the next big thing in wearables, little attention is being given to the effect on the wearers privacy. Economic questions, system effects and emergent properties all suggest a very complex and dynamic information environment that is unlikely to behave the way users expect.

Privacy is an essential cornerstone to the functioning of society and failures can do very serious harm, even when the person has ‘nothing to hide’. Contextual disclosure is needed if people are to feel safe and confident in a wearables-dominated world.

In this track, we encourage submissions that address issues such as:

1. *Economic effects.* Diverse motivations and price competition will inevitably lead to more disloyal devices and conflicting business models in the market for wearables. Is giving up privacy the inevitable subsidy for cheap devices?

Lack of transparency. Users today do not know what is happening to their data when is it uploaded to servers, or even that it is being uploaded at all.

2. *Poor authentication techniques.* Small form factors, low power chips and poor security ergonomics in wearable devices inhibit implementation of good mechanisms to verify users and verify affirmative consent.

Poor Encryption. Low computational capabilities and conflicting priorities tend to prevent the use of good encryption on wearable devices and on the wire.

3. *Third Party privacy.* What happens to the privacy of people near a device that captures some of their voice, visual or virtual data? How do we define consent and ‘public space’?

Wearable Device Management. Companies have policies in place to deal with Mobile Device Management - handling mobile devices of their employees to protect from data theft - but how does this translate to wearables? What are the new threats to corporate data?

4. *Healthcare Information Privacy*. Many of the wearables today have access to very sensitive health data. How should it be handled? How should it be communicated to the user? How do we define the ‘need to know’? What safeguards should be put in place to prevent misuse of data?
5. *Industrialization*. What considerations must be brought to bear when consumer wearable technology is brought into more serious domains such as medical, industrial and automotive domains?
6. *What comes next?* We encourage submissions exploring what will be the new applications of wearables and embeddables and the impact these will have on user privacy and security
7. *Blockchain and Wearables*. How can we improve today's technology with introduction of blockchain technology?

Important Datelines

- Inform the Chair: As soon as you decided to contribute
- Submission: ~~January 15~~ **March 15**
- Notification with comments for camera-ready: ~~February 20~~ **March 22**
- Registration: ~~March 5~~ **April 1**
- Camera ready: ~~March 15~~ **April 1**

Contribution Types

- Regular papers [in the proceedings, digital library]
- Short papers (work in progress) [in the proceedings, digital library]
- Posters: two pages [in the proceedings, digital library]
- Posters: slide only [slide-deck posted on www.iaria.org]
- Presentations: slide only [slide-deck posted on www.iaria.org]
- Demos: two pages [posted on www.iaria.org]

Paper Format

- See: <http://www.iaria.org/format.html>
- Before submission, please check and comply with the editorial rules: <http://www.iaria.org/editorialrules.html>

Publications

- Extended versions of selected papers will be published in IARIA Journals: <http://www.iariajournals.org>
- Print proceedings will be available via Curran Associates, Inc.: <http://www.proceedings.com/9769.html>
- Articles will be archived in the free access ThinkMind Digital Library: <http://www.thinkmind.org>

Paper Submission

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Registration

- Each accepted paper needs at least one full registration, before the camera-ready manuscript can be included in the proceedings.
- Registration fees are available at <http://www.iaria.org/registration.html>

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