

Call for Papers

Special Track on “Avoiding an Internet of Trash” at ACM GoodIT’24

The 4th ACM International Conference on Information Technology for Social Good (GoodIT 2024) is a premier international forum for researchers, practitioners, and educators to present and discuss the most recent innovations, trends and concerns, as well as practical challenges encountered and solutions adopted in the fields of data and technology for addressing Social Good and the UN Sustainable Development Goals. Within the context of the conference, we are organizing a special track “*Avoiding an Internet of Trash*”, focused on a sustainable Internet of Things. We are witnessing an ever-increasing number of Internet of Things (IoT) devices with predictions of between 50 and 125 billion IoT devices by 2030. There is currently no information about how long these devices will be used. If one goes by the lifetime of smartphones or laptops, this could be in the order of 4 - 6 years. Without any action, this situation could produce a large amount of electronic waste. Many factors contribute to this situation, including issues of planned obsolescence of devices, software maintenance, volatile businesses, poor battery capacity, and unnecessary gadgets. This challenge is further compounded by the fact that there is often limited interoperability between devices and little reuse and limited recycling of unused IoT devices. This special track aims at creating a forum for discussion on how to address all these issues.

We welcome submissions on a wide range of topics, including but not limited to:

- Sustainable powering of IoT devices and energy harvesting;
- Sustainable electronics for IoT devices;
- Methods and frameworks for reprogramming of IoT devices;
- Modular and reconfigurable IoT device architectures;
- Interoperability of IoT devices, protocols, and frameworks;
- Environmental impact of IoT devices;
- Sustainable deployment of IoT applications;
- Analysis of the usefulness of IoT devices and applications;
- IoT applications for sustainability;
- Behavioural and societal aspects in the sustainable use of IoT devices and resources.

Submission guidelines: Papers submitted to this special track must be unpublished original works. Submitted papers must satisfy the same criteria in terms of paper length and formatting requirements as papers submitted to the main conference (more details are provided [here](#)). Accepted papers must follow the formatting instructions of the main conference. At least one of the authors of all accepted papers must register and present the work at the conference on site; otherwise, the paper will not be published in the proceedings. All accepted and presented papers will be included in the conference proceedings published in the ACM Digital Library.

Important dates:

- Paper submission deadline: May 17th, 2024
- Notification of acceptance: July 8th, 2024
- Camera-ready deadline: July 19th, 2024

Organizers of the special track:

- Dirk Pesch (University College Cork, Ireland)
- Carlo Alberto Boano (Graz University of Technology, Austria)

TPC Members:

- Michael Baddeley (TII, United Arab Emirates)
- Anna Förster (University of Bremen, Germany)
- Daniela Iacopino (Tyndall National Institute, Ireland)
- Oana Iova (INSA Lyon, France)
- Ramona Marfievici (Digital Catapult, United Kingdom)
- Brendan O’Flynn (Tyndall National Institute, Ireland)
- Michael Stead (Lancaster University, United Kingdom)