

# The Internet of Everything: Converging the Internet of People and the Internet of Things

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## Abstract

*This introduction initiates readers to the topic of the Internet of Everything which includes the Internet of Things, the Internet of People and the Internet of Everything. It also highlights salient research issues to inspire scholars. Lastly, it provides a short introduction and discussion of the papers in the minitrack.*

## 1. Introduction

This minitrack explores social, technological, legal, and organizational perspectives of emerging types of “Internets”, including:

- The *Internet of Things* (IoT), as a computing concept that allows everyday physical objects to be connected to the “traditional” Internet, so that these are able to identify themselves to other devices and engage in seamless and automatic data exchange.
- The *Internet of People* (IoP) emerges with the increase of embedded and wearable technologies (wearable fitness trackers and wearable or embedded medical devices) extend people’s roles from being mere users and observers of the Internet to becoming *part* of the Internet.
- The *Internet of Everything* (IoE) materializes when IoT and IoP converge, bringing together people, processes, data and things (objects) for a new, networked world of ever-expanding data streams.

Authors were invited to submit to this minitrack new empirical and theoretical submissions that address issues related to these Internets (particularly to IoP and the emerging IoE) in a variety of contexts, including but not necessarily limited to the following themes:

- Emerging trends regarding the intersections and potential convergences of IoP, IoT and IoE
- Analysis of the successes, failures, winners, and losers in the IoP, IoT and IoE convergences

- Technologies, applications, legality, security and organizational issues related to IoP and IoE
- Big data management (e.g., storing, accessing, analyzing, and reacting to IoP / IoE data)
- Opportunities and challenges related to consumer behavior (e.g., privacy concerns, behavioral modifications) with respect to wearable and embedded technologies
- Key issues for innovators, developers, IT firms, and technology vendors

Two papers were selected for inclusion in these proceedings. They address the IoE through the lenses of, respectively, user engagement and modelling language.

In “Enhance User Engagement using Gamified Internet of Things”, Ruowei Xiao and colleagues consider how gamification may enhance people’s engagement with the IoE. The paper synthesizes and analyzes existing research efforts, categorizing the literature according to the dimensions of cognitive-behavioral outcome, procedural state, and population scale.

Our second paper, authored by Gero Strobel and entitled, “Information Systems in the Era of the Internet of Things: A Domain-Specific Modelling Language” helps build a sound conceptual understanding and common language for IoT-based information systems. This work contributes to realization of the full potential of smart products tying together the physical and digital worlds.

## References

- [1] G. Strobel, “Information Systems in the Era of the Internet of Things: A Domain-Specific Modeling Language,” HICSS 2021.
- [2] R. Xiao, Z. Wu, O.T. Burak, and J. Hamari, “Enhance User Engagement using Gamified Internet of Things,” HICSS 2021