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Volume 35, 2018 - [Issue 2](#)

2,099

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# Internet of Things: A Comprehensive Review of Enabling Technologies, Architecture, and Challenges

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Pages 205-220 | Published online: 08 Feb 2017

Cite this article

<https://doi.org/10.1080/02564602.2016.1276416>



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## ABSTRACT

Internet of Things (IoT) has become a continuously growing concept with the advancements of ubiquitous computing, wireless sensor networks, and machine-to-machine (M2M) communication. IoT connects heterogeneous physical devices and enables communication among them over the Internet via uniquely addressable identifiers. This paper delivers an overview of IoT in the context of the architecture and related technologies. However, IoT does not adhere to a universal architecture. Hence, it describes widely accepted architectural designs, further elaborated with the corresponding communication protocols and standards. Moreover, highly prevalent protocols and standards are summarized, so that the reader can gain an overall view of IoT. Furthermore, it describes some identified solutions and future directions towards overcoming the challenges present in the IoT paradigm. Finally, the paper concludes

with some applications of IoT, in order to realize the feasibility of IoT concept in real-world scenarios.

#### KEYWORDS:

Heterogeneous devices   IoT   Ubiquitous computing   Wireless sensor network

## Additional information

### Funding

This study was supported by the BK21 Plus project (SW Human Resource Development Program for Supporting Smart Life) funded by the Ministry of Education, School of Computer Science and Engineering, Kyungpook National University, Korea [21A20131600005]; and Basic Science Research Program through the National Research Foundation of Korea (NRF) funded by the Ministry of Education, Science and Technology and National Research Foundation of Korea (NRF) [2016R1D1A1B03933566].

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