Engineering Cyber-Physical Systems and Critical Infrastructures 3

Jude Hemanth · Danilo Pelusi · Joy Iong-Zong Chen *Editors*

Intelligent Cyber Physical Systems and Internet of Things

ICoICI 2022

Springer

Editors
Jude Hemanth
Department of Electronics
and Communication Engineering
Karunya Institute of Technology
and Sciences
Coimbatore, Tamil Nadu, India

Joy Iong-Zong Chen
Department of Electrical Engineering
Da-Yeh University
Dacun, Changhua, Taiwan

Danilo Pelusi
Faculty of Communication Sciences
University of Teramo
Teramo, Italy

ISSN 2731-5002 ISSN 2731-5010 (electronic)
Engineering Cyber-Physical Systems and Critical Infrastructures
ISBN 978-3-031-18496-3 ISBN 978-3-031-18497-0 (eBook)
https://doi.org/10.1007/978-3-031-18497-0

This Springer imprint is published by the registered company Springer Nature Switzerland AG
The registered company address is: Gewerbestrasse 11, 6330 Cham, Switzerland

Contents

Convergence of Communication Technologies with Internet of Things

V. Dankan Gowda, Suma Sira Jacob, Naziya Hussain, R. Chennappan, and D. T. Sakhare

Abstract Internet of Things (IoT) is the term used to describe a network of physical things such as mobile devices and household appliances that are embedded with electronics, software, sensors, and network connection that enables these objects to gather and exchange data. Sensors, recognition and remote control of items are all made possible by the Internet of Things (IoT). Once this property is combined with sensors and actuators, it becomes an example of a cyber-physical system, which includes technologies like intelligent power grids (grids), intelligent homes (smart homes), smart cities (smart cities), and intelligent transportation systems (ITS). Integrating MANET and WSN with IoT is covered in this study. Technology and protocols needed to deploy the Internet of Things (IoT) are explored in this article.

Keywords Internet of things · Wireless sensor network · Protocol · Network · Sensor · Node

V. Dankan Gowda (✉)
Department of Electronics and Communication Engineering, BMS Institute of Technology and Mangement, Bangalore, Karnataka, India
e-mail: researchr08@gmail.com

S. S. Jacob
Department of Information Technology, Sri Krishna College of Technology, Coimbatore, Tamil Nadu, India

N. Hussain
School of Computers, IPS Academy, Indore, Madhya Pradesh, India

R. Chennappan
Department of Computer Science, Karpagam Academy of Higher Education, Coimbatore, Tamil Nadu, India

D. T. Sakhare
Department of Chemistry, U.G., P.G. and Research Centre, Shivaji Arts Commerce and Science College, Kannad Dist. Aurangabad, Maharashtra, India

J. Hemanth et al. (eds.), *Intelligent Cyber Physical Systems and Internet of Things*, Engineering Cyber-Physical Systems and Critical Infrastructures 3,
https://doi.org/10.1007/978-3-031-18497-0_48