

 ACM Transactions on Internet Technology	ACM Transactions on Internet Technology (TOIT) https://dl.acm.org/journal/toit Special Issue on Recent Advances in Green Computing and Internet of Things
Important Dates Manuscript Submission: July 30, 2020 First Notification: November 30, 2020 Submission of Revised Manuscript: January 15, 2021 Final Notification: February 30, 2021 Final Paper Due: March 20, 2021	<p>Wireless identifiable devices and the utilization of IoT technologies in green related applications and environmental conservation are one of the most promising market segments in the future, and there will be an increased usage of wireless identifiable devices in environmentally friendly programs worldwide. Standardization efforts for RFID and WSNs are considering data rates of up to 1Mb/s, heterogeneous sensor integration and different frequencies. This will open up new applications with positive impacts on society, such as remote data monitoring in disaster scenarios, ubiquitous connectivity for health monitors in body area networks, and wireless broadband for rural areas. Secure communications are also a concern of end users. In the meantime, operators are looking beyond the capital expenditure costs of running RFID networks to minimizing operational costs such as power consumption and site costs. Green IoT can be defined as the energy efficient procedures (hardware or software) adopted by IoT either to facilitate reducing the greenhouse effect of existing applications and services or to reduce the impact of greenhouse effect of IoT itself. The use of IoT will help reduce the greenhouse effect, whereas further optimization of IoT greenhouse footprint will be taken care. The entire life cycle of green IoT should focus on green design, green production, green utilization and finally green disposal/recycling to have no or very small impact on the environment. “Anytime, anywhere communication” has been a long-time dream and fueling advances in wireless communication technologies. The reduction in terms of size, energy consumption, and cost of the radio lead to its integration in almost every object. Moreover, increasing number of vehicles, urbanization and many industrial activities have increased air pollution considerably in the last few decades. Traditionally, data loggers were used to collect data periodically with bulky equipment that was time consuming and quite expensive to operate. The use of IoT technology can make air pollution monitoring less complex and help in better understanding the environment.</p>
Guest Editors Dr. B. B. Gupta, National Institute of Technology, Kurukshetra, India Email: bbgupta@nitkkr.ac.in Dr. Dharma P. Agrawal, University of Cincinnati, Cincinnati, USA Email: dpa@cs.uc.edu Dr. Songqing Chen, George Mason University, USA Email: sqchen@gmu.edu Dr. Jinsong Wu, Universidad de Chile, Santiago, Chile Email: wujs@ieee.org	<p>This special issue mainly focuses on green computing and Internet of things, addressing both original algorithmic development and new applications. We are soliciting original contributions, of leading researchers and practitioners from academia as well as industry, which address a wide range of theoretical and application issues in this domain.</p> <p>Potential topics include but are not limited to the following:</p> <ul style="list-style-type: none"> • Green services in IoT • Green IT engineering methodology for mobile and IoT computing • Energy efficiency in the Internet of Things • Cloud computing for the green IoT • Mobility management in green IoT • Green and smart building systems based on IoT and mobile technologies • Green and ubiquitous computing in IoT • Smart buildings and urban development • Cloud models enhance security, potential of Internet of Things • Green resource scheduling and optimisation • Green security strategies and designs • Development techniques and tools for green computing • Energy harvesting, storage, and recycling • Energy saving solutions and trade offs • Power-efficient computing, delivery and cooling • Green engineering, agenda, supply chains, logistics, and audit • Green measurement, profiling, test-beds, and results • Green Mobile, embedded computing and networking • Secure device-to-device communication in IoT networks
ACM TOIT Editor-in-Chief Professor Ling Liu School of Computer Science Georgia Institute of Technology ling.liu@cc.gatech.edu	
Submission Instructions: Please Refer to http://toit.acm.org/authors.cfm Please select “Recent Advances in Green Computing and Internet of Things” in the TOIT Manuscript Central Website	