

*[IEEE Internet of Things Journal](#)* Special Issue on  
***Nature-Inspired Approaches for IoT and Big Data***

### **Call for Papers**

Nature-inspired approaches have been widely used during the last two decades for different purposes and have remained a highly-researched topic, especially for complex real-world problems. The intelligence of nature-inspired approaches comes from biological systems or nature in general. The efficiency of these techniques is due to their significant ability to imitate the best features of nature which have evolved by natural selection over millions of years. These methods have been successfully used for internet of things (IoT) and big data handling and good examples could be artificial neural networks and deep learning applications to these topics. On this basis, the main theme of this special issue is about any nature-inspired approach that can be used for IoT and big data problems. Topics of interest include (but not limited to):

- Emerging Hardware Architectures for IoT and Big Data
- IoT and Big Data Analytics on Energy-Constrained platforms
- Optimization, Control, and Automation
- Computational and Artificial Intelligence algorithms
- Fog and Cloud Computing for (near) real time analytics
- Smart cities and systems
- Blockchain for data security and privacy
- Fault tolerant, redundant systems
- Visualization techniques

### **Timetable**

Submissions Deadline: November 1, 2018

First Reviews Due: January 15, 2019

Revision Due: February 15, 2019

Second Reviews Due/Notification: March 15, 2019

Final Manuscript Due: April 15, 2019

Publication Date: 2019

### **Submission Guideline**

Authors need to follow the manuscript format and allowable number of pages described at: <http://ieee-iotj.org/guidelines-for-authors/>. To submit a manuscript for consideration for the special issue, please visit the journal submission website at: <https://mc.manuscriptcentral.com/iot>. During the submission, select the special issue and also state the title of the special issue: "SI: Nature-Inspired Approaches for IoT and Big Data" in the cover letter. Articles will be published online immediately after acceptance.

### **Lead Guest Editor**

- Amir H. Gandomi, Stevens Institute of Technology, USA ([a.h.gandomi@stevens.edu](mailto:a.h.gandomi@stevens.edu))

### **Guest Editors**

- Mahmoud Daneshmand, Stevens Institute of Technology, USA ([mdaneshm@stevens.edu](mailto:mdaneshm@stevens.edu))
- Rashmi Jha, University of Cincinnati, Cincinnati, USA ([ihari@ucmail.uc.edu](mailto:ihari@ucmail.uc.edu))
- Devinder Kaur, The University of Toledo, Toledo, USA ([devinder.kaur@utoledo.edu](mailto:devinder.kaur@utoledo.edu))
- HuanSheng Ning, University of Science and Technology Beijing, China ([ninghuansheng@ustb.edu.cn](mailto:ninghuansheng@ustb.edu.cn))
- Calvin Robinson, NASA Glenn Research Center, USA ([calvin.r.robinson@nasa.gov](mailto:calvin.r.robinson@nasa.gov))
- Herb Schilling, NASA Glenn Research Center, USA ([hschilling@nasa.gov](mailto:hschilling@nasa.gov))

**More Information:** <http://gandomi.beacon-center.org/si-on-iot-and-big-data/>