

Method for Increasing the Various Sources Data Consistency for IoT Sensors

Sokolov, V.^a, Kipchuk, F.^a, Skladannyi, P.^a, Zhyltsov, O.^a, Ageyev, D.^b

^aBorys Grinchenko Kyiv University, Kyiv, Ukraine

^bKharkiv National University of Radioelectronics, V. V. Popovskiy Infocommunication Engineering Department, Kharkiv, Ukraine

Abstract

The paper represents importance of performing data consistency operations with data sets, where it is possible and essential. Producing vast amounts of data by the Internet of Things (IoT) devices and sensors, all electronic data must be organized and processed. The approach presented in this paper may help researchers look for new areas of processing data, making it more consistent and reviewing already presented, maybe not so efficient methods. Learning from real-life examples, the efficiency of using smart devices, and the coverage of cellular or global positioning systems show many exciting and inspirational ways to work on science and practical success. This paper aims to create a method for combining data from different sources to obtain the best quality of the resulting data. The paper shows that we continue to increase number of sources to process and operate data, making it essential to process correctly and qualitatively. Researching approaches to make data more consistent and precise will be present almost all time. © 2022 IEEE.

Author keywords

Accuracy; cellular; consistency; GNSS; IoT; ranking; sensor set; statistics

About this paper

<https://ieeexplore.ieee.org/document/10238518>

Online ISBN: 979-8-3503-9891-5

DOI: [10.1109/PICST57299.2022.10238518](https://doi.org/10.1109/PICST57299.2022.10238518)

EID: [2-s2.0-85172739043](https://ieeexplore.ieee.org/document/10238518)

First Online: 6 September 2023

Original language: English

Publisher: IEEE Inc.