

Omni: Data Science Platform for Evaluate Performance of a LoRaWAN Network

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Abstract : Nowadays, physical processes are becoming digitized by the evolution of communication, sensing and storage technologies which promote the development of smart cities. The evolution of this technology has generated multiple challenges related to the generation of big data and the active participation of electronic devices in society. Thus, devices can send information that is captured and processed over large areas, but there is no guarantee that all the obtained data amount will be effectively stored and correctly persisted. Because, depending on the technology which is used, there are parameters that has huge influence on the full delivery of information. This article aims to characterize the project, currently under development, of a platform that based on data science will perform a performance and effectiveness evaluation of an industrial network that implements LoRaWAN technology considering its main parameters configuration relating these parameters to the information loss.

Keywords : Internet of Things, LoRa, LoRaWAN, smart cities

Conference Title : ICBDASC 2019 : International Conference on Big Data Analytics for Smart Cities

Conference Location : Dublin, Ireland

Conference Dates : November 07-08, 2019