



Internet of Things Analytics

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Abstract

The Internet of Things (IoT), the large network of physical devices that extends beyond the typical computer networks, will be creating a huge quantity of Big Data streams in real time in the near future. The realization of IoT depends on being able to gain the insights hidden in the vast and growing seas of data available. Since current approaches do not scale to Internet of Things (IoT) volumes, new systems with novel mining techniques are necessary due to the velocity, but also variety, and variability, of such data. This IoT challenging setting needs algorithms that use an extremely small amount (iota) of time and memory resources, and that are able to adapt to changes while not stopping the learning process. These algorithms should be distributed to allow them to run on top of Big Data infrastructures. How to do this accurately in a fully automatic, and transparent elastic, real-time, system is going to be the main challenge for IoT analytics systems in the near future.