University of Namur

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IHDCB339

Complex Event Processing for Internet of Things

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July 13, 2019



1 Introduction

The Internet of Things is omnipresent and the amount of connected devices is increasing day by day. The Internet of Things is different from a classic information system by its capability for integrating with the physical world. Those devices are used in plenty of sectors (health, industry, domotic systems, ...) and their users can be both professionals and individuals. Nowadays, we can see the apparition of connected devices for home to facilitate our daily life. (e.g. Google Home, Nest, Philips Hue) IoT is also an interesting technology for Smart Cities use case. We can imagine a city where traffic lights are optimised with the city mobility to avoid traffic jams for example. However, an important problem arises in this type of architecture. How is it possible to handle such an important data traffic efficiently? Indeed, if an entire city has a huge amount of connected objects, the data flow to be processed is massive. Therefore efficient data processing mechanism needs to be put in place to handle such a flow.

2 Data Treatment Complexity

(Penser à parler au fog et cloud computing qui a beaucoup paru dans les articles) Attention ne pas parler uniquement du CEP mais également d'autres techniques.

- 2.1 Technique A
- 2.2 Technique B
- 2.3 Complex Event Processing
- 3 Chap 2
- 3.1 Sub-Section
- 4 Chap 3
- 4.1 Sub-section 1
- 4.2 Sub-section 2
- 4.2.1 Sub-sub-section 1
- 4.2.2 Sub-sub-section 2
- 5 Methodology
- 6 Conclusions

List of Figures