IOT Challenges: Functional Safety

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***Abstract*—in this paper main focus is emphasizing the importance of functional safety in the field of Internet Of Things (IOT), while also analyzing the today's standardised requirements, which each IOT device has to follow.**

I. Introduction

Short introduction to Functional Safety of IOT (FuSa for short). Maybe also a quick history part, of how it developed.

What kind of FuSa categories are there, and how are they defined. Rely on the Reference [1]

II. Example Issues and Unique Solutions

Some examples of how IOT Functionality can go wrong and what was or might be done to avoid the problems. Rely on the Reference [1]

III. Standardised Requirements

A. IEC 61508

Rely on the document of References [2] and [3].

B. ISO 13849

Rely on the document of Reference [3] (also the document AN9025, which has the introduction to this standard).

IV. Advantages

V. Disadvantages

VI. Summary and Conclusion

Summary of paper and conclusion to the whole topic in one.

VII. Affidavit

I, Vytaras Juraska, herewith declare that I have composed the present paper and work by our self and without use of any other than the cited sources and aids. Sentences or parts of sentences quoted literally are marked as such; other references with regard to the statement and scope are indicated by full details of the publications concerned. The paper and work in the same or similar form has not been submitted to any examination body and has not been published. This paper was not yet, even in part, used in another examination or as a course performance.

References

[1] S. Robinson, "Living with the Challenges to Functional Safety in the Industrial Internet of Things," in *Living in the Internet of Things (IoT 2019)*. London, UK: Institution of Engineering and Technology, 2019, pp. 35 (6 pp.)–35 (6 pp.). [Online]. Available: https://digital-library.theiet.org/content/conferences/10.1049/cp.2019.0160

[2] R. Bell, "Introduction to IEC 61508," p. 10.

[3] T. Meany, "Functional safety and Industrie 4.0," in *2017 28th Irish Signals and Systems Conference (ISSC)*. Killarney, Co Kerry, Ireland: IEEE, Jun. 2017, pp. 1–7. [Online]. Available: http://ieeexplore.ieee.org/document/7983633/