Reading a Paper:

Health care applications: a solution based on the internet of things

KIE-34106 Academic Writing in English

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I chose to read the paper "Health care applications: a solution based on the internet of things" [1], which is one of the papers I've chosen to use in my writing assignment on IoT applications in healthcare. In reading the paper, I tried to follow the advice of the linked text "How to Read a Paper" by Keshav & Cheriton. They recommend reading the paper in three passes, each of which increases the detail that is paid to the text.

In the first pass I read the headings, abstract, introduction and references. This gave a pretty good overall view on the paper. It also allowed me to answer the "five Cs":

- 1. Category: My chosen paper is sort of a cross between an analysis of the current state of the field, and a proposal for its future implementation.
- 2. Context: The context of the paper is a meeting point between multiple different fields. There's the electronics and sensors which are used to collect data, the communication networks that stream and collect that data and there's also some mention of data mining, processing and handling.
- 3. Correctness: The assumptions that the paper makes appear valid, but that's partly due to the fact that the paper doesn't make a lot of assumptions or conclusions, it just mostly follows the current state of affairs, with a little futuristic predictions thrown in.
- 4. Contributions: The contributions are giving a clear view of the state of the field, which is actually very useful for me, or others who are interested but new to the field. It also tries to propose ways of how these systems utilizing IoT in healthcare can be formed, but the effects of that can only be seen when they are formed.
- 5. Clarity: I felt it was written clearly enough. There are some long, meandering sentences with a lot of difficult words, but mostly it was easy enough to understand.

In the second pass I read all the sections that I didn't read before. I also studied the figures carefully. The text used a hypothetical person in the near-future, and followed his day and how it was made better by IoT healthcare applications. After that they detailed the existing technology and protocols, and how they could be best used to construct a working IoT healthcare system.

I didn't need a third pass, as the text wasn't that long, and it was quite simple to understand. I also knew enough about the technologies presented that I didn't feel the need to read up on them.

I think the most useful part of this exercise was trying out the "three passes method". Especially as "newbie" in reading articles its very helpful to have a structured way to read them. The method also seems great that you can quickly and easily "pre-process" papers to see if they're worth reading. Definitely helpful for the future, and something I'll intend to use in writing my theses.

Viitteet

[1] N. Bui ja M. Zorzi, "Health care applications: A solution based on the internet of things", teoksessa *Proceedings of the 4th International Symposium on Applied Sciences in Biomedical and Communication Technologies*, sarja ISABEL '11, Barcelona, Spain: ACM, 2011, 131:1–131:5, ISBN: 978-1-4503-0913-4. DOI: 10.1145/2093698.2093829. url: http://doi.acm.org/10.1145/2093698.2093829.