

Interactive comment on “Raspberry Pi based Smart Sensing Platform for Drinking Water Quality Monitoring System: A Python Framework Approach” by Punit Khatri et al.

Anonymous Referee #1

Received and published: 24 February 2019

In this paper a Raspberry Pi based Smart Sensing Platform is described, including Graphic User Interphase and a Fuzzy Inference System modelled in Python for drinking water quality monitoring. The topic is of importance since on-line water quality monitoring is emerging and dash-board like applications to inform operators and support them in decision making is becoming relevant. However the presented paper is rather superficial mainly describing the system and not the advantages in terms of operation. Especially because the application is about monitoring of groundwater quality that does not vary much in time and, therefore, is not the most indicated example to test such an on-line system. General comments: - Avoid starting abstract and introduction with very general statements on the “global water crisis” - It is not clear if the

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application is about groundwater quality (page 2, line 1) or drinking water quality (after treatment of groundwater, page 2 line 24). - The choice of the sensors seems more practical than related to e.g. health issues. More explanation of this should be given. - More explanation of the reasoning behind the “post-processing” should be given (as described on pg 4 and in figure 5). In principle drinking water is “good” when all parameters are in the specification or “unsatisfactory/bad” when at least one is out the specifications. - Avoid copying figures and tables from others sources (such as figure 1-5; table 1) - Check language including tenses: present tense when general, past tense when part of own research - Avoid repetition: explanation in materials and methods should not be repeated in results and discussion - Give more emphasis on the results and discussion: how do the results relate to other methods/literature, what is the advantage/disadvantage of the implemented system; what is missing and what is the way forward, etc. Specific comments: - Pg1, line 7-9, delete sentence (not relevant here) - Pg 1, line 11, 12, 13, “is” = “was” (check rest of paper too) - Pg1, line 17-19, delete sentence (not relevant here) - Pg1, line 21-22, delete sentence (not relevant here) - Pg 1, line 25, “chlorine” = “chloride” - Pg 1, line 29, “Therefore...” Not clear what is meant, so rephrase. - P2, line 6, explain the reasoning behind the guideline.. - Pg 2, line 15-17 check referencing (only last name first author, e.g.Jinturkar et al. (2010) and Icaga (2007) have... - Pg 2, line 15, check parentheses. - Pg 2, line 25, this is a totally wrong statement! Not all water with e.g. high or low DO content contains e.g. nicotine... - Pg 3, line 7 “produce” = “produces”. - Pg 4, line 6 “system” = “system” - Pg 5, line 2 check parentheses. - Pg 5, line 24-30, repetition of materials and methods - Pg 6, line 8-11, this should be the major message of the paper. What can we conclude, how does this relate to other work, how we can use the system e.g. for error detection? Now it is not more than sensor validation.

Interactive comment on Drink. Water Eng. Sci. Discuss., <https://doi.org/10.5194/dwes-2018-35>, 2019.

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