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Letter of review of *Development of an Evolutionary Filter Optimization Routine (EFOR)*:

With the exception of a few editorial comments, your paper on the development of an EFOR reads well and provides the audience with meaningful insights into the project. The use of a genetic algorithm for a neutron beam filter problem is interesting and exciting. Therefore, the paper is accepted with minor revisions.

The revisions are broken down into two categories: editorial, where it is expected correction be made; and suggestive, where the reviewer believes improvements could be made if implemented.

Editorial:

1. An ASME style heading was expected but not received.
2. Abstract – there is no determiner in front of the first use of 'genetic algorithm' or 'algorithm' on its own.
3. Abstract – 0.7s is mentioned in the abstract but not anywhere else in the body. Figure 4 demonstrates this but it seems that if something is important enough for the abstract, it should be discussed somewhere else in the body.
4. Introduction – (KSU) is defined as an acronym but not used anywhere else. The definition should be removed.
5. Introduction – EFOR is not defined in the body of the work before its use. The definition in the title shouldn't be the only place.
6. Description of EFOR, third sentence – "and if ran in parallel," to "and, if run in parallel,".
7. Description of EFOR, "The cycle script is…" – "with in" to "within".
8. Description of EFOR, "The data is then stored…" – stored is used twice in this sentence. If it is a different action, that is unclear from the current sentence.
9. Figure 1 – The figure needs to be labelled to let the audience know what they're looking at.
10. Experiments, both equations for fitness – N_remaining, has a comma with unknown meaning behind it. If there is meaning, explain; if there is no meaning, remove.
11. Experiments, "Follow that, an…" – "Follow" to "Following".
12. There is no conclusion of the work – answering the questions 1 and 2 of the 'suggestive' comments could lead to an acceptable paper ending.

Suggestive:

1. Have you selected a "best" filter?
2. How does the GA compare with previously accomplished work on the filter?
3. What are the bounds for construction of the filter? Ex. N_remaining must be > some number for the detector to work? Material thickness must be > minimum manufacturable thickness, etc.

4. Printed in black and white, the NG-FT plots are unhelpful. Also, do all generations need to be presented on these plots? Would you lose valuable information if only odd generations were presented?
5. Proper nouns (such as names of code constructs) could be a different font to help the reader identify them as such.

Thank you,

Reviewer