Dear Dr. Hatzilygeroudis,

Please thank your review team for their excellent and helpful comments. Using their feedback we were able to turn the original, somewhat rambling text, into a much more coherent technical presentation.

Our specific replies to reviewer comments are offered below.

Thank you once again!

REVIEWER 1

The presentation needs to be improved substantially. The paper has too many grammatical errors, especially in the first several pages of the paper. Also, there are some repetitious statements and paragraphs. The paper assumes that the figures will be printed in color. If this is not the case, some of the text has to be changed. Also, the "References" section needs to be extensively revised to include the title of all the articles. The presentation problem was a distraction. The paper needs to be extensively proof-read to remove all the grammatical errors. That would then make it much easier for readers to focus on the technical contribution. The technical content appears to be very good, so the focus should be on improving the presentation.

> The above problems have been addressed- the new draft has been significantly reorganized and condensed.
>
> One issue is that we may have discarded too much of the background material that the reviewer found of value. In our view, the current draft is much clearer but we would be open to re-inserting some the deleted background material.

REVIEWER 2:

The bibliography needs much work. As far as I can see there are no titles given. Other information is missing, the formats change abruptly during presentation.

> There was a major latex area prior to submission, which is now fixed. One remaining issue is that, sometimes, there are some trailing new lines followed by a ".". This is some quirk in the Latex style files (that does not occur when we use other styles). If the paper is accepted, we would work with the IJAIT production staff to resolve this issue.

Most of the references are used in the first half of the paper. When it comes to the second half, their references are used much more sparsely.

The earlier part of the paper contains much background material, and hence many more references. If required, we could more move work into a later "related work". The reorganization of the first part of the paper helps to make the connect to the title more explicit and obvious.

The title is interesting but has little to do with the paper.

Title is now changed to a more appropriate phrase: “Satisficing Control Policies for Software Projects“

The paper when all is said and done concerns data mining applications. Control policies for SE projects are never discussed directly. For example, after 13 pages of general survey the paper gives an example that deals with weather prediction relative to playing golf. This table (Figure 2) is almost the same as that in the data mining textbook of Witten and Frank except that values in each of the 14 rows are tweaked ever so slightly from the original. Why did you do that? And, there is no mention about where this data set was originally taken.

The golf data source is now referenced (actually, it does not come from Witten but from Quinlan's papers from the early 1990s). The original gold data was a two class system. We make it 3 classes to illustrate multi-class reasoning in our approach.

The golf example is used because the are small enough to explain. The rest of the paper explores examples so large that it would take a very large paper, indeed, to explain them.

Needless to say, this example, has nothing to do with software project control policies, but it should.

We have presented this material many times to many audiences and found that if we used a more complex example as our first introductory illustration, then we lose the audience. The problem is that real-world models are complex- so complex that , if we used a relevant example then it would be too complex to be a tutorial example.

3. The core to the approach is the notion of collars and clumps. While they have an intuitive meaning, no formal definition is given for them. This is problematic since there are already numerous and similar concepts out there. So, the question is why are these different from the rest?

We've added more definitions in section 4. But please note, our point is that treatments are _not_ different from 100 other synonyms reported in the literature. But just because other researchers have found a similar concept, does not mean that they have realized how to best exploit what they have found. TAR2 is a learner that is designed around the ideas of collars. The algorithm could fail if collars do not exist. But it they do, then TAR2 should work and work well.

4. No pseudo-code for the TAR2 approach is given. Only a performance function is given. Also, terms in the expression need to be made more precise.

> We have added more information in the form of pseudo-code of the TAR2 algorithm.

5. Their approach is compared to other approaches that are well documented in the literature. However, it is not clear how they are used in this paper. The authors say that the algorithms are given in figure 7, but that is not an algorithm as far as I can see.

> Our mistake – out algorithm is added now

REVIEWER 3

1. The paper is poorly written and needs serious editing for correcting syntactic and grammatical errors as well as the meaning of quite a few parts.

> The new draft has been extensively revised. Much redundant material has been deleted and, following the reviewer's advice, we have added numerous clarification points to the rest of the text.

2. The authors in general failed to convince about the suitability and effectiveness of their proposition as the paper lacks scientific depth and elaboration in key parts (see specific comments). They stay at a rather high level of abstraction and assume that the reader follows their rationale without clearly presenting one.

> We fully acknowledge the poor focus in the previous draft. The new version is much more focused and, as discussed at bottom of page1, this paper now addresses a glaring hole in prior work with TAR2; namely that the models we used before to check TAR2 were tool small to be of interest. In this paper, we explore much more complex models that previously

3. The proposed approach seems promising but on one hand the fact that the authors rely heavily on previous work of their own which hinders elaborating on key concepts and on the other the use of a rather subjective and not widely used approach/case study for validation purposes makes its acceptance and appreciation quite difficult.

> Previously we have compared TAR2 to standard data mining methods (see reference 40. the comparison was based on the standard UC Irvine data sets_. That work used metrics and methods that are standard in the field of data mining (e.g. we used cross-validation).
>
> That work, based on standard methods, has been criticized as being too generic, with few conclusions of interest to convince a standard SE project manager that this work was of value. Here, we have taken an alternate approach and applied the method to models of interest to such standard managers.

4. There is a lot of repetition in the paper. This either suggests that the authors did not pay much attention to writing and submitting a paper of a high documentation quality or they sensed that their paper lacks proper description and elaboration but failed to provide it resulting in unneeded repetition in various parts.

We have pruned that repetition

5. Finally, the paper does not conform with the instructions to authors. Especially the references section (misses titles of papers, page numbers, etc.)

We apologize for that- there was a latex error just prior to submission that we missed. This draft fixes that error. However, we are having some trouble with the style file supplied by the publisher. We have written 100s of papers with latex and the (few) bugs remaining in the bibliography are most puzzling (e.g. a blank line followed by a "." on some entries). If the paper is accepted, we would with the journal's publication staff to remove those errors.