

Dear Editor,

We are submitting our manuscript entitled “PatchID: A Overfitting Patches Identification Method for Automated Program Repair” for consideration for publication in Springer.

Because Automated Program Repair(APR) tools always generat a large number of overfitting patches that not only fail to fix the original error, but also cause new errors, we have studied it and written this paper. This paper proposes a new method called PatchID to identify overfitting patches and classifiy overfitting patches into three types of patches. We implement the method and evaluate on two datasets consisting of 157 Defects4J patches and 380 Java+JML patches, respectively. The accuracy is 49% and 44% on the two datasets. We believe that our approach can further advance the development of APR.

This manuscript describes original work and is not under consideration by any other journal. All authors approved the manuscript and this submission.

Thank you for receiving our manuscript and considering it for publication in Springer. We appreciate your time and look forward to your response.

Yours sincerely,

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