## **ABSTRACT**

In manual testing, testers typically follow the steps listed in the bug report to verify whether a bug has been fixed or not. Depending on time and availability of resources, a tester may execute some additional test cases to ensure test coverage. In the case of manual testing, the process of finding the most relevant manual test cases to run is largely manual and involves tester expertise. From a usability standpoint, the task of finding the most relevant test cases is tedious as the tester typically has to switch between the defect management tool and the test case management tool in order to search for test cases relevant to the bug at hand. In this paper, we use IR techniques to recover trace ability between bugs and test cases with the aim of recommending test cases for bugs. We report on our experience of recovering trace ability between bugs and test cases using techniques such as Latent Semantic Indexing (LSI) and Latent Dirichlet Allocation (LDA) through a small industrial case study.