Journal-First Statement on Novelty for "How to Analyze Build Logs - A Systematic Survey and Comparative Study of Chunk Retrieval Techniques"

Dear Editors,

we are submitting this paper as a journal-first article as it explores the area of build log analysis which to the best of our knowledge was not systematically overviewed before.

In addition to that, we contribute

- the introduction of the concept of chunk retrieval techniques---a specific group of approaches to analyze build logs
- the first reference implementation of three chunk retrieval techniques
- the first extensive, empirical comparison of chunk retrieval techniques
- the first guidelines on when to use which technique for build log analysis
- an extensive replication package to enable reproduction and
- a detailed research map to inspire future work in the area of build log analysis.

The data set we created for this study was previously submitted and accepted: https://2020.msrconf.org/details/msr-2020-Data-showcase/2/LogChunks-A-Data-Set-for-Build-Log-Analysis It is not part of this article.

We believe that the novelty of this work on this emerging field justifies a journal-first submission.

Thank you!

Carolin Brandt and Moritz Beller