

Replication project of "On the Effectiveness of Log Representation for Log-based Anomaly Detection"

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Abstract—Provide a summary of the motivation, approach, results, and conclusions. You may use a structured abstract that includes: context, objective, method, results, conclusion. Be as concise as possible.

I. INTRODUCTION

Brief intro about problem and why this replication/extension is important.

II. APPROACH

Explain how you replicated and extended the original paper's approach. A overview figure is preferred to guide your description of the approach. Also don't forget to discuss the characteristics of your data sets and how you prepare/preprocess them before starting your analysis (if any). You may discuss the difficulties you found and (in case of uncertainty) which decisions you had to take to make things work.

Note: Describe your approach in a concise and unambiguous way: others should be able to repeat your experiments following your report. Justify your design decisions (e.g., the selection of the models, evaluation metrics, statistical analysis methods). You can cite papers like this [1]. You can use a different citation format but do keep it consistent.

III. RESULTS

Present the results of your replication and extension. Compare your results with that in the original paper. You are encouraged to organize your results through answering a few research questions (RQs). You can follow a similar presentation as the original paper.

Note: Do not simply present your results, but also explain your results and discuss their implications. If you cannot explain a result, then something is probably wrong. Highlight a few take-home messages that you want readers to learn from your results.

IV. CONCLUSION

A conclusion is not a summary of the approach and/or results. Instead, you should focus on the implications of your results and the key take-home messages. You may also briefly discuss potential future directions inspired by your results.

V. TEAM CONTRIBUTION

Explain the contribution by each team member.

REFERENCES

- [1] S. He, J. Zhu, P. He, and M. R. Lyu, "Experience report: System log analysis for anomaly detection," in *IEEE 27th International Symposium on Software Reliability Engineering (ISSRE)*, 2016, pp. 207–218.