**Cover letter for the paper titled: Application of Microservices Patterns to Big
Data Systems**

Pouya Ataei and Daniel Staegemann

School of Engineering, Computer and Mathematical Sciences, Auckland University of
Technology, Auckland ,New Zealand

Faculty of Computer Science, Otto von Guericke University Magdeburg, Magdeburg,
Germany

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Dear editor,

We wish to submit an original research article entitled "Application of Microservices Patterns to Big
Data Systems" for consideration by Journal of Big Data. We confirm that this work is original and has
not been published elsewhere, nor is it currently under consideration for publication elsewhere.

In this paper, we explore the application of Microserivces patterns to big data systems. This is
significant because it can help with challenges of data architecture.

We believe that this manuscript is appropriate for publication by Journal of Big Data because it is
within the journal's aim and scope, and the topics of interests, specifically 'artificial intelligence, data
analytics and big data applied in software engineering'.

According to various surveys, approximately 75% of big data projects have failed within the industry.
Among the challenges, data architecture and system development are bold. To this end, our research
aims to facilitate this area by applying Microservices patterns to big data systems. We have conducted
a systematic literature review following the guidelines of 'Preferred Reporting Items for Systematic
Reviews and Meta-Analyses' for the development of the theories. These theories are then validated
through an empirical study. The results show good degree of relevance, and various thought-
provoking architectural trade-offs.

We have no conflicts of interest to disclose.

Please address all correspondence concerning this manuscript to me at pouya.ataei@aut.ac.nz.

Thank you for your consideration of this manuscript.

Sincerely,

Pouya Ataei and Daniel Staegemann