Dr. Benji Gyampoh, PhD, Editor-in-Chief Scientific African 29 November 2023

Dear Dr. Benji Gyampoh,

I am submitting my manuscript entitled "Mini-Process Cubes: Enabling Real-Time Analysis and Process Discovery in Stream Process Mining" for consideration for publication in Scientific African. The research presented in this paper proposes a new approach for online process mining that leverages OLAP techniques and process cubes. Our approach offers a scalable and manageable framework for generating meaningful process models and insights in real-time from log data.

The key idea behind our approach is to use OLAP and process cubes to create smaller, more manageable sub-models of the event log. The process cubes are constructed in a way that helps in the final analysis, such as by selecting the appropriate time interval. These sub-models are then used in the online phase to create mini-process cubes that are similar in structure to the offline process cubes. This allows analysts to process and analyze data in a more efficient way.

The use of offline information as a reference can be very helpful in terms of analysis. For example, we can use precomputed models. If the incoming data is similar to what already exists, we can simply load the precomputed model. In many cases, the real-time data will not be much different from what we already have in offline data.

Each of the authors confirms that this manuscript has not been previously published and is not currently under consideration by any other journal. Additionally, all of the authors have approved the contents of this paper and have agreed to the Scientific African's submission policies.

Each named author has substantially contributed to conducting the underlying research and drafting this manuscript. Additionally, to the best of our knowledge, the named authors have no conflict of interest, financial or otherwise.

Thank you for considering my manuscript. I look forward to your favorable response.

Sincerely,

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