Dear Editor,

I am pleased to submit our manuscript, titled **"MTC-GA: A Multitasking Approach for Blood Glucose Level Forecasting"**, for consideration in **IEEE Journal of Biomedical and Health Informatics**. This work addresses critical gaps in diabetes management by proposing a novel hybrid framework that combines the strengths of personalized and generalized modeling approaches, effectively balancing accuracy and computational efficiency for blood glucose forecasting.

Our study introduces **MTC-GA**, a multitasking model integrating Temporal Convolutional Networks (TCN), Gated Recurrent Units (GRU), and multi-head attention mechanisms within task-specific layers. This innovative architecture achieves competitive accuracy, comparable to personalized models, while reducing complexity by 40%, making it suitable for real-world deployment. The model has been rigorously evaluated on the OhioT1DM dataset across diverse prediction horizons (15 to 120 minutes) using both numerical metrics (MAE, RMSE) and clinical evaluation tools (Clarke Error Grid Analysis). The results demonstrate significant improvements in both numerical and clinical outcomes compared to existing state-of-the-art models.

Key contributions of this work include:

* **Proposing a novel multitasking framework** for scalable and accurate blood glucose forecasting.
* **Benchmarking against personalized and generalized approaches**, highlighting the advantages of shared-layer architectures.
* **Comprehensive evaluation across multiple metrics and prediction horizons**, ensuring robustness and clinical relevance.

This research addresses a critical need for scalable and accurate glucose forecasting solutions, paving the way for enhanced diabetes management tools. We believe that the innovative aspects of our work, combined with its practical applicability, make it a strong fit for publication in IEEE Journal of Biomedical and Health Informatics, particularly given the journal’s focus on biomedical applications.

We affirm that this manuscript is original, has not been published elsewhere, and is not under consideration by another journal. All authors have reviewed and approved the final manuscript and have no conflicts of interest to disclose.

Thank you for considering our submission. We look forward to the opportunity to share our work with the scientific community and to contributing to the ongoing advancements in diabetes management. Please do not hesitate to contact me should you require any additional information or materials.

Sincerely,

Mennatullah Mahmoud