

Bucaramanga, August 10, 2018

Sorana D. Bolboacă, PhD

Department of Medical Informatics and Biostatistics

"Iuliu Hațieganu" University of Medicine and Pharmacy Cluj-Napoca

Dear Dr Bolboacă,

I am pleased to submit an original research article entitled "Hierarchical and Partitional Cluster Analysis of Glucose and Insulin Data from the OGTT" for consideration for publication in Applied Medical Informatics.

This is an original manuscript that has not been published and is not under consideration for publication elsewhere. In this work I evaluate two different strategies of cluster analysis (hierarchical and partitional) to cluster subjects based on the plasma glucose and insulin concentration taken from the oral glucose tolerance test. The clustering strategies were applied to subjects with the metabolic syndrome and professional marathon runners. The results show that it is possible group subjects based on their metabolic profile (glucose and insulin data at different time instant), with k-means being the clustering algorithm that best grouped data.

This manuscript could be of broad interest for researchers interested in machine learning in biomedical engineering, metabolic disorders, insulin resistance and the benefits of physical training.

I have no conflicts of interest to disclose.

Sincerely,



Miguel Altuve, PhD
Associate Professor
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