

## **Multi-Objective Optimization of Electrocardiogram Monitoring Network for Elderly Patient in Home**

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The most challenges of Wireless Body Area Network (WBAN) are energy consumption because its works using limited resource like battery and end-to-end delay because it is used to transmit real time parameters of patients' health status like Electrocardiogram (ECG). In this paper we present and discuss the modeling of a multi objective problem. The first objective is the minimization of the end to end delay; the second objective is maximization of the energy efficiency of the network depending on packets payload size. We use jMetal to test the problem using three genetic algorithms (NSGA-II, SPEA-II and OMOPSO) and we compare between them.

Hamdan, Mohammad, **Shehadeh, Hisham A.**, Obeidat, Qusai Y., Multi-Objective Optimization of Electrocardiogram Monitoring Network for Elderly Patient in **Home**, Int. J. Open Problems Compt. Math.