# PERFORMANCE ANALYSIS OF WIRELESS SENSOR NETWORK

A project report is presented in partial fulfilment of the requirements for the award of the Bachelor Degree (Hons) of Electrical Engineering UNIVERSITITEKNOLOGI MARA

 $I^{\mathbf{P}^{\mathbf{K}^{\mathbf{A}}\mathbf{S}^{\mathbf{A}}}}$ 

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### ABSTRACT

This project presents the performance analysis of Wireless Sensor Network (WSN). Basically, Wireless Sensor Network is used in the high-end applications such as weapons sensor ship, biomedical applications, habitat sensing and seismic monitoring but recently Wireless Sensor Network also focusing on national security applications and consumer applications. The Wireless Sensor Network models were created and simulated using QualNet Developer software simulator in order to produce the performance of the networks. Several sensor nodes were uniformly deployed in the networks to create sensing phenomena and the simulation results were in term of the amount packets of data sent and received by each node, the throughput and delay. All these graphical simulation results from several WSN models will be compared and analyzed separately.

Therefore, the important factors and issues pertaining to the Wireless Sensor Network will be determined and describe briefly.

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