Collective Neighbour Discovery in Wireless Sensor Network

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Abstract

Neighbour discovery is one of the imperative elements of wireless sensor network which discerns close by nodes so that they can reciprocate information and collaborate. In this paper collective neighbour discovery is proposed to reduce latency period and accomplish the discovery more efficiently. To achieve this purpose each node will be active during recommended neighbours’ active time to attain rapid neighbour discovery. Comparison shows that collective neighbour discovery performs better than the existing searchlight protocol. We evaluate the performance and characteristics of collective neighbour discovery by varying different parameters. One feature of this protocol is that it can be combined with searchlight protocol. Simulation and analysis shows that the combined protocol enhances the performance and abates the latency of searchlight effectively.

References

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Index Terms

Computer Science  Wireless

Keywords

Duty cycle, threshold, Window size, latency