

基于最小二乘法的蒙特卡洛移动节点定位算法

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摘要:

针对无线传感器网络中蒙特卡洛移动节点定位算法的不足, 提出了一种基于最小二乘法的蒙特卡洛移动节点定位算法。该算法线拟合的方法, 推算出未知节点在下一时刻可能的位置区域, 进行快速抽样和样本过滤。仿真结果表明: 新算法在不同的网均表现出良好的性能。

关键词: 无线传感器网络; 移动节点; 定位; 蒙特卡洛; 最小二乘

Monte-Carlo mobile node Localization algorithms based on Least Squares Methc

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Abstract:

In view of the deficiencies of Monte Carlo localization algorithm in mobile wireless sensor networks, a new localization algorithm fe Carlo is introduced. According to the continuity of movement to carry out least-squares curve-fitting, the possibility location region sample and filter is more efficient to node localization compare to the MCL and MCB. Simulation results that the new algorithm has connectivity and movement velocity.

Keywords: Wireless Sensor Network; Mobile Nodes; localization; Monte-Carla; Least Squares

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