

## 一种减小NLOS影响的TDOA / AOA数据融合定位算法

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**摘要** 提出了到达时间差 / 到达角数据融合定位算法. 利用RBF神经网络对到达时间差的测量值进行修正以减小非视距传播影响, 然后利用到达时间差定位算法和到达角定位算法分别估算移动台位置, 最后对到达时间差和到达角定位结果进行加权平均得到移动台位置. 仿真结果表明该算法在郊区、一般市区和闹市区环境下均能够有效地提高定位精度和可靠性.

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## Effective TDOA / AOA data fusion location algorithm for mitigating the influence of the NLOS propagation

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### Abstract

A time difference of arrival / angle of arrival (TDOA / AOA) data fusion location algorithm is proposed. The RBF neural network is made use of to correct the measurement of TDOA to mitigate the effect of the non-line-of-sight (NLOS) propagation, then the position of MS is calculated by the TDOA location algorithm and AOA location algorithm, and finally the position of MS is determined by the weighted average of TDOA and AOA location results. Simulation results indicate that this algorithm can significantly improve the location accuracy and reliability under suburban, urban and bad urban environments. <BR>

**Key words** [non-line-of-sight](#) [time difference of arrival](#) [angle of arrival](#) [data fusion](#)

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