



AN INDOOR POSITIONING ALGORITHM AND ITS EXPERIMENT RESEARCH BASED ON RFID

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Abstract- A kind of indoor locating algorithm based on RFID has been put forward since the indoor positioning system can not fully meet the requirements of location services. The algorithm takes the propagation characteristic of signal as the breakthrough point and improves the positioning precision of the algorithm by means of regional division, regional judgment strategy, virtual node, and so on. The optimal target position of the access point was put forward and an effective analysis of the regional division and virtual node was done along with the robustness design through the experimental analysis. The result of the indoor positioning experiment shows that this algorithm is of high positioning precision, providing technical support for developing the indoor positioning system based on RFID.

Index terms: Indoor Positioning Algorithm, Experimental Analysis, Virtual Node.