PROBABILITY SENSING MODEL BASED ENHANCEMENT OF COVERAGE FOR VIDEO SENSOR NETWORKS

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Abstract- With the foundation of the video probabilistic sensing model that sensing direction is steerable, the study on path coverage enhancement algorithm for video sensor networks has been improved, analysis the position of effective center of mass in the sensor's model, the network calculates the gravitation between the target track points and the trace nodes, and the repulsive force between both trace nodes of the target track points, then the trace node adjusts its sense direction, make the probability of the target track points which is perceived by the sensor network equals or exceeds the perception threshold. The simulation result shows that, this improved algorithm has make further improvement on the perception of the target which is move in the coverage area, it uses more fewer directional video nodes, but the video sensor networks is fully and high effectively covering the target trajectory.

Keywords: **Probability** *sensing model; video sensor nodes; virtual force.*