

عنوان مقاله:

Distributed Algorithms for Complete Coverage in Ad hoc Wireless Network using Graph Theory

محل انتشار:

دومین کنفرانس بین المللی مهندسی دانش بنیان و نوآوری (سال: 1394)

تعداد صفحات اصل مقاله: 13

نویسندگان:

Davar Piralilu - Department of Computer Engineering and Information Technology, Payame Noor University Tehran, IRAN

Bita Amirshahi - Department of Computer Engineering and Information Technology, Payame Noor University Tehran, IRAN

خلاصه مقاله:

Most existing studies investigate the coverage problem by using of computational geometry methodology. Their algorithms assume accurate node coordinates are available, anddetermine the coverage by geometric tools, such as well-known Delaunay triangulations, Voronoi diagrams, and geometric diskgraphs, and etc. In this study, we will resolve the restrictions of previous methods and present an efficient design of distributed coverage that provides the possibility of access to the partitioned network coverage as well as possesses minimum hardware costs and energy loss.Compared with existing methods, our design has particular advantage, which permits us to configure or adjust the quality of coverage by adequately exploiting diverse sensingranges and specific requirements of different applications. We formally prove the correctness and evaluate the effectiveness of our approach through extensive .simulations and comparisons with the stateof-the-art approaches

کلمات کلیدی:

wireless ad hoc and sensor networks; coverage; distributed; connectivity; topologic graph; cycle partition; mobile; (graph(key words

لینک ثابت مقاله در پایگاه سیویلیکا:

https://civilica.com/doc/553205

