Abstract

Euclidean graphs are widely used in various fields,
such as computing sciences, space exploration, neural
networks, etc. In many cases, the majority of these graphs
have vertices randomly deployed. This random aspect can
make the graph divided into disjoint connected components
with a topology that needs to be built. We propose a
new technique to find the connected components and their
boundaries using only connectivity information between a
vertex and their neighbors. We show by an extensive simulation
that the algorithm gives good results with a random
generation of Wireless Sensors Networks.