

Abstract

Network is a general term that is growing rapidly nowadays, generally networks represent many types of data in various fields. The network can be represented as a graph. The graph contains a sub graph that can form a triangle. There are several methods related to calculating the number of triangles (Triangle counting), including the brute force algorithm. This algorithm produces high accuracy, but requires very long computing. In this final project, an analysis of the parallel implementation of brute force is carried out to calculate the number of triangles in a graph using Open MP and in data distribution. By parallelizing the distribution of the data obtained speed up 2.28131 by cyclic and 2.23429 in ordinary parallel with the difference in speed up 0.04702 where the cyclic is quite good.

Keywords: triangle counting, graph, brute force, vertex, openMP