

Brief Article

The Author

November 26, 2013

Abstract

THIS IS THE ABSTRACT

Keywords

graph, triangles count

1 Introduction

2 Problem Description

3 Algorithm

The following section covers how the algorithm works. Let us start by defining some notations.

3.1 Notations

Let $G = (V, E)$ be an weighted, undirected simple graph and let $n = |V|$ and $m = |E|$.

A vertex v denotes an actor. Any edge e between vertices v_1 and v_2 denotes a set of movies these two actors have played in together. Weight of the edge, $W(e)$ denotes the size of that set.

Denote by $A(v)$ the set of adjacent edges to vertex v .

$YYY(e)$ is the set of (two) vertices adjacent to an edge e .

$SET(v_1, v_2 \dots v_n)$ - returns a set of unique elements.

MovieCount denotes the biggest number found so far of common movies between any given three actors.

3.2 Pseudocode

```
MovieCount  $\leftarrow$  0
Actor1  $\leftarrow$  null
Actor2  $\leftarrow$  null
Actor3  $\leftarrow$  null
for  $v \in V$  do
```

```
 $i \leftarrow 0$   
end for
```

4 Analysis

4.1 Running time

4.2 Space usage

5 Conclusion

5.1 This is the conclusion text

5.2 Future Work

6 References