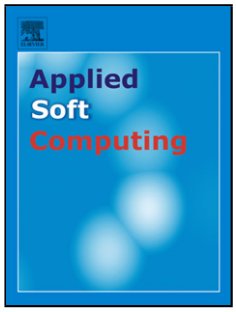
Accepted Manuscript



Title: Parallel Quantum-inspired Evolutionary Algorithms for Community Detection in Social Networks

Author: Shikha Gupta Stuti Mittal Tamanna Gupta Isha Singhal Barkha Khatri Ajay K. Gupta Naveen Kumar

PII: S1568-4946(17)30446-5
DOI: http://dx.doi.org/doi:10.1016/j.asoc.2017.07.035
Reference: ASOC 4363

To appear in: *Applied Soft Computing*

Received date: 28-8-2016
Revised date: 11-6-2017
Accepted date: 17-7-2017

Please cite this article as: Shikha Gupta, Stuti Mittal, Tamanna Gupta, Isha Singhal, Barkha Khatri, Ajay K. Gupta, Naveen Kumar, Parallel Quantum-inspired Evolutionary Algorithms for Community Detection in Social Networks, *<![CDATA[Applied Soft Computing Journal]]>* (2017), http://dx.doi.org/10.1016/j.asoc.2017.07.035

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

ACCEPTED MANUSCRIPT

Highlights

- A GPU-based CUDA implementation of quantum-inspired evolutionary algorithms (QIEA)
- QIEA, an EA, merges the worlds of biological and quantum unitary evolution
- Proposed algorithms maximize the modularity value, discover community structure successfully
- Algorithms have been parallelized, first at the thread level and second at the block level
- Proposed algorithms achieve significant speedup over the serial versions.

Accepted Manuscript

Download English Version:

https://daneshyari.com/en/article/4962922

Download Persian Version:

https://daneshyari.com/article/4962922

Daneshyari.com