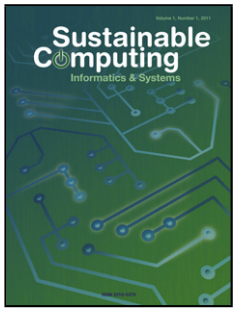

Title: Dynamic Tasks Scheduling Based on Weighted Bi-graph in Mobile Cloud Computing

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Dear Editors:

The highlights of our paper (**Dynamic Tasks Scheduling Based on Weighted Bi-graph in Mobile Cloud Computing**) are listed as follows.

Mobile Cloud Computing (MCC) and Fog Computing-like computing paradigms are increasingly important due to the rapid deployment of wireless devices and mobile applications. VR-like computing-intensive applications can provide users with rich experience with the cost of much computation and storage burden. Therefore, offloading part of mobile applications or tasks can remarkably reduce the energy-consumption of end-user devices and enlarge the lifetime of the whole wireless networks. However, the mobile cloud or fog systems have to efficiently utilize available resources to handle offloaded tasks. A few existing algorithms want to tackle this problem with complex bio-inspired algorithms. To reduce the computation burden brought by scheduling algorithms, in this paper, a Dynamic Tasks Scheduling algorithm based on Weighted Bi-graph model (DTSWB) is presented. At first, the scheduling problem is translated into a maximum weighted bi-graph matching problem. An integer programming model is formulated based on the matching problem. The task scheduling process mainly consists of four parts: information collection of offloaded tasks and service providers, establishment of mapping relationship, determination of weight matrix and generation of optimal matching strategy based on Kuhn Munkras (KM) algorithm. Compared with existing batch-based scheduling schemes, our scheduling algorithm takes the dynamic of tasks and service providers into consideration. At last, the effectiveness and validity of the proposed scheduling algorithm is verified by a series of simulations.

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