

Univeristy of Central Florida
4000 Central Florida Blvd
Orlando, FL 32816

November 13, 2014

Dr. David A. Bader
Editor-in-Chief
IEEE TPDS

Dear Dr. Bader

I am pleased to submit an original research article entitled “A Lock-free Priority Queue Design Based on Multi-dimensional Linked Lists” for consideration for publication in the *IEEE Transactions on Parallel and Distributed Systems*.

In this manuscript, we present a scalable design of lock-free priority queue for shared-memory multiprocessor systems. Our approach employees a novel multi-dimensional list structure that minimizes inference among concurrent insertions. It provides considerable speedups over the state-of-the-art skiplists based approaches. We believe that this manuscript is appropriate for the publication by TPDS because concurrent priority queue is a fundamental data structure, and its throughput is pivotal to the performance of a number of parallel applications.

This manuscript has not been published and is not under consideration for publication elsewhere. We have no conflicts of interest to disclose.

Thank you for your consideration!

Sincerely,

A handwritten signature in black ink, appearing to read 'Deli Zhang', with a stylized flourish at the end.

Deli Zhang
Ph.D. Candidate, Department of EECS
University of Central Florida