Abstract

Sherif Fahmy

Providing QoS in Contention Management for Software Transactional Memory

We study the issue of providing quality of service guarantees to software transactional memory. Specifically, we attempt to quantify the type of quality of service (or QoS) guarantees that we can provide using only contention management in software transactional memory. We then present three different algorithms for providing these QoS guarantees and show analytically and empirically that they do in fact operate as expected.