Concurrent Oblivious Tree Data Structure Implementation

Plan for Submission

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Conference: 24th ACM Symposium on Parallelism in Algorithms and Architectures (SPAA 2012)

Website: http://www.cs.jhu.edu/~spaa/

Submission Deadlines:

Abstracts: January 25 (11:59 pm EST) Full papers: February 1 (11:59 pm EST)

We plan on making a submission to the aforementioned ACM Symposium on November 25th, 2011, a week after the final submission of our research paper detailing the results of our R&D efforts. We chose this conference principally because the topic is the most relevant in regards to our subject. Most of the other ACM conferences that we researched fell outside of our scope. One alternative choice was the ACM Symposium on the Theory of Computing (STOC 2012), however the submission deadline of November 2nd does not leave us enough room for a full examination of our research topic and a final critique by you.

What we expect to see, and what our submission will detail, is the significantly improved performance of our concurrent implementation of this oblivious data structure versus the sequential version as the number of threads increases. We also expect to see competitive performance when compared to contemporary non-incremental digital signature schemes.