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MADALGO seminar by Andy Twigg, University of Oxford

Persistent Streaming Indexes

Abstract:

Cache-oblivious streaming B-trees (indexes) were introduced by Bender et al in 2007 to support fast updates. I will describe a partially-persistent cache-oblivious streaming index. It uses linear space, and supports updates in $O(\log N / B)$ IOs, and queries in $O(\log N + K/B)$ IOs in an average-case sense.