Project Proposals for 6.895

October 15, 2003

- **Improving Cilk**
  - Adaptively Parallel Processor Allocation for Cilk Jobs (Kunal Agrawal and Siddhartha Sen)
  - Fast Serial-Append File I/O Mode Support for Cilk (Alexandru Caracas)
  - A Space-Efficient Global Scheduler for Cilk (Jason Hickey and Tyeler Quentmeyer)
  - Automatic Conversion of Non Series-Parallel DAGs to Series Parallel DAGs (Sajindra Jayasena and Sharad Ganesh)
- **Transactional Cilk**
  - Language-Level Complex Transactions (C. Scott Ananian)
  - An Evaluation of Nested Concurrent Transactions (Sean Lie)
  - Atomic Transactions in Cilk (Jim Sukha)
  - Transactions in Cilk (Xie Yong)
- **Non-Determinacy Detection**
  - Linear Time Detection of Determinacy Races (Jeremy Fineman)
  - Parallel Nondeterminator (He Yuxiong)
  - Parallel Nondeterminator (Wang Junqing)
- **Using Cilk**
  - Accelerating Multiprocessor Simulation (Kenneth C. Barr)
  - Parallelizing METIS (Zardosht Kesheff)
  - Parallelizing Sorting (Paul Youn)
  - Implement FIR filter in parallel using Cilk (Pham Duc Minh)
- **Cache-Oblivious Algorithms**
  - Cache-Oblivious Sorting for Burrows-Wheeler Transform (Advait D.Karande and Sriram Saroop)
  - New Cache-Oblivious Algorithms (Zhang Jiahui and Neel Kamal)
  - Cache-Oblivious, Lock-Free Algorithms (Seth Gilbert)

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