### Parallel Programming Models and Languages

* [X10: An Object-Oriented Approach to Non-Uniform Cluster Computing](http://users.ece.utexas.edu/~garg/multicore/papers/x10.pdf). Philippe Charles, Christian Grothoff, Vijay Saraswat, Christopher Donawa, Allan Kielstra, Kemal Ebcioglu, Christoph von Praun, and Vivek Sarkar.SIGPLAN Not. 40, 10 (October 2005), 519-538.

Hector-Jesus Acosta-Garcia, Aaron Davis

* [The implementation of the Cilk-5 multithreaded language.](http://users.ece.utexas.edu/~garg/multicore/papers/cilk_98.pdf) Matteo Frigo, Charles E. Leiserson, and Keith H. Randall, In Proceedings of the ACM SIGPLAN 1998 conference on Programming language design and implementation (PLDI '98).

Guillermo Leon Oliva, Subhash Mullapudi,

* Wei-Lun Hung, Vijay K. Garg, [AutoSynch: An Automatic-Signal Monitor Based on Predicate Tagging](http://users.ece.utexas.edu/~garg/multicore/papers/p253-garg.pdf), PLDI 2013 , pp. 253-262.

Robert Pate, Van Quach

### Testing and Verification

* [Finding and Reproducing Heisenbugs in Concurrent Programs.](http://research.microsoft.com/en-us/projects/chess/osdi2008-chess.pdf) M. Musuvathi, S. Qadeer, T. Ball, G. Basler, P. A. Nainar, I. Neamtiu. In Operating System Design and Implementation (OSDI), 2008.

Brice Ngnigha

* C. Flanagan and S. N. Freund. "[FastTrack: Efficient and Precise Dynamic Race Detection](http://users.ece.utexas.edu/~garg/multicore/papers/p121-flanagan.pdf)." In Proceedings of Conference on Programming Language Design and Implementation (PLDI), pages 121–133, 2009.

, Ryan Patrick

* [A Parallel Algorithm for Global States Enumeration in Concurrent Systems](http://users.ece.utexas.edu/~garg/multicore/papers/p140-chang.pdf), Yen-Jung Chang, Vijay K. Garg. Principles and Practice of Parallel Programming (PPoPP 2015).

, Justin Richeson

### Concurrent Data Structures

* Panagiota Fatourou and Nikolaos D. Kallimanis. 2012. [Revisiting the combining synchronization technique](http://users.ece.utexas.edu/~garg/multicore/papers/combining_fatourou.pdf). In Proceedings of the 17th ACM SIGPLAN symposium on Principles and Practice of Parallel Programming (PPoPP '12). ACM, New York, NY, USA, 257-266.

Maurice Roth-Miller, Michael Spagon

* Wei-Lun Hung; Himanshu Chauhan; Vijay K. Garg [ActiveMonitor: Asynchronous Monitor Framework for Scalability and Multi-Object Synchronization](http://users.ece.utexas.edu/~garg/multicore/papers/p404-Hung.pdf)*OPODIS 2015*

Anil Thakur, Gregory Woodard

* David Klaftenegger, Konstantinos Sagonas, and Kjell Winblad. 2014. [queue delegation locking](http://users.ece.utexas.edu/~garg/multicore/papers/Queue_Delegation_Locking.pdf). In Proceedings of the 26th ACM symposium on Parallelism in algorithms and architectures (SPAA '14). ACM, New York, NY, USA, 70-72.

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| **Miscellaneous**   * Nir Shavit and Dan Touitou. 1995. [Software transactional memory](http://users.ece.utexas.edu/~garg/multicore/papers/software_TM_shavit.pdf). In Proceedings of the fourteenth annual ACM symposium on Principles of distributed computing (PODC '95). ACM, New York, NY, USA, 204-213.      * Scott Beamer, Krste Asanović, and David Patterson. 2012. [Direction-optimizing breadth-first search](http://users.ece.utexas.edu/~garg/multicore/papers/a12-beamer.pdf). In Proceedings of the International Conference on High Performance Computing, Networking, Storage and Analysis (SC '12). IEEE Computer Society Press, Los Alamitos, CA, USA, , Article 12 , 10 pages. * C. A. R. Hoare. 1978. [Communicating sequential processes.](http://users.ece.utexas.edu/~garg/multicore/papers/p666-hoare.pdf) Commun. ACM 21, 8 (August 1978) * [Eraser: a dynamic data race detector for multithreaded programs](http://doi.acm.org/10.1145/268998.266641), Stefan Savage, Michael Burrows, Greg Nelson, Patrick Sobalvarro, and Tom Anderson, in ACM Trans. Comput. Syst. 15, 4 (Nov. 1997), 391-411. In Proceedings of the 16th ACM symposium on Operating systems principles. Saint Malo, France, 27-37, 1997. * Danny Hendler, Itai Incze, Nir Shavit, and Moran Tzafrir. 2010. [Flat combining and the synchronization-parallelism tradeoff.](http://users.ece.utexas.edu/~garg/multicore/papers/flat-combining.pdf) In Proceedings of the twenty-second annual ACM symposium on Parallelism in algorithms and architectures (SPAA '10). ACM, New York, NY, USA, 355-364. |
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