



Invitation to the First International Workshop on Parallel and Distributed Systems: Testing and Debugging (PADTAD)

Saturday, April 26, 2003

Organized by IBM Haifa Research Lab, Israel

We cordially invite you to a full-day seminar focusing on the testing and debugging of parallel and distributed systems, to be held on Saturday, April 26, 2003. The seminar, which will be held in conjunction with the International Parallel and Distributed Processing Symposium (IPDPS) in Nice, France, will take place from 8:30 to 17:00, with a discussion to follow the final lecture. Lunch and light refreshments will be served.

[Http://www.haifa.il.ibm.com/Workshops/TestingAndDebugging/](http://www.haifa.il.ibm.com/Workshops/TestingAndDebugging/)

8:30–8:45 *Introduction to the First International Workshop on Parallel and Distributed Systems: Testing and Debugging (PADTAD)*

Eitan Farchi, Paul Lu, and Shmuel Ur

8:45–9:30 *** Invited Lecture ***

Efficient On-the-Fly Data Race Detection in Multi-threaded C++ Programs

Eli Pozniansky and Assaf Schuster

9:30–10:00 *Concurrent Bug Patterns and How to Test Them*

Eitan Farchi, Yarden Nir, and Shmuel Ur

10:00–10:30 Coffee Break

10:30–11:00 *A Classification of Concurrency Failures in Java Components*

Brad Long and Paul Strooper

11:00–11:30 *** Invited Lecture ***

Experiences and Lessons Learned with a Portable Interface to Hardware Performance Counters

Jack Dongarra, Kevin London, Shirley Moore, Philip Mucci, Patricia Teller, Dan Terpstra, Haihang You, and Min Zhou

11:30–12:00 *** Invited Lecture ***

Benchmark and Framework for Encouraging Research on Multi-threaded Testing Tools

Klaus Havelund, Scott Stoller, and Shmuel Ur

12:00–13:30 Lunch

13:30 -- 14:00 *Heuristics for Finding Concurrent Bugs*
Yosi Ben-Asher, Yaniv Eytani, and Eitan Farchi

14:00–14:30 *Replay Debugging of Real-Time Systems Using Time Machines*

Henrik Thane, Daniel Sundmark, Joel Huselius, and Anders Pettersson

14:30–15:00 *Choosing Among Alternative Pasts*

Marina Biberstein, Eitan Farchi, and Shmuel Ur

15:00–15:30 Coffee Break

15:30–16:00 *Early Error Detection in Industrial Strength Cache Coherence Protocols Using SQL*
M. Subramaniam

16:00–16:30 *A Case Study of Selected SPLASH-2 Applications and the SBT Debugging Tool*

Ernesto Novillo and Paul Lu

*** Followed by discussion on the last invited lecture's proposals.

Eitan Farchi

ORGANIZING COMMITTEE

Paul Lu

Shmuel Ur