EXADAPT
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2nd International Workshop on
Adaptive Self-Tuning Computing Systems for the Exaflop Era
(EXADAPT 2012)

London, UK
March 3rd, 2012

(co-located with **ASPLOS 2012**)

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Modern large scale computing systems are rapidly evolving and may soon feature millions of cores with exaflop performance. However, this leads to a tremendous complexity with an unprecedented number of available design and optimization choices for architectures, applications, compilers and run-time systems. Using outdated, non-adaptive technology results in an enormous waste of expensive computing resources and energy, while slowing down time to market.

The 2nd International Workshop on Self-tuning, Large Scale Computing Systems for Exaflop Era (EXADAPT) is an interdisciplinary forum for researchers, practitioners, developers and application writers to discuss ideas, experience, methodology, applications, practical techniques and tools to improve or change current and future computing systems using self-tuning technology. Such systems should be able to automatically adjust their behavior to multi-objective usage scenarios at all levels (hardware and software) based on empirical, dynamic, iterative, statistical, collective, bio-inspired, machine learning and alternative techniques while fully utilizing available resources.

All papers will be peer-reviewed including short position papers and should include unpublished ideas on how to simplify, automate and standardize the design, programming, optimization and adaptation of large-scale computing systems for multiple objectives to improve performance, power consumption, utilization, reliability and scalability.

Important Dates:

Final submissions due: January 6, 2012 (23:59:59 submitter's time zone)
Author notification: January 20, 2012
Final paper: February 10, 2012

Paper Submission Guidelines:

We invite papers in two categories:

Full papers should be at most 12 pages long including bibliography and appendices. Papers in this category are expected to have relatively mature content. Full paper presentations will be 25 minutes each.

Position papers should be at most 6 pages long including bibliography and appendices. Preliminary and exploratory work are welcome in this category, including wild & crazy ideas. Position paper presentations will be 10 minutes each. Authors submitting papers in this category must prepend the phrase Position Paper: to the title of the submitted paper.

Submissions should be PDF documents typeset in the ACM proceedings format using 10pt fonts. Both full and position papers must describe work not published in other refereed venues (see the SIGPLAN republication policy for more details). *The proceedings of this workshop will be published in the ACM International Conference Proceedings Series (ISBN 978-1-4503-1147-2) and ACM Digital Library.*

Prior workshops and proceedings:

1st ACM SIGPLAN EXADAPT 2011 at PLDI/FCRC 2011, San Jose, USA

http://exadapt.org/2011

Proceedings:

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