HEART 2013

4th International Symposium on Highly Efficient Accelerators and Reconfigurable Technologies

Edinburgh, Scotland, 13-14 June 2013

Organized by

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The HEART symposium is an international forum for state-of-the-art research in high-performance and power-efficient computing using accelerator technologies such as reconfigurable architectures, GPGPUs, and/or specialized accelerators. The fourth edition of HEART will take place in the City of Edinburgh, Scotland, UK.

The scope of the symposium includes, but is not limited to:

Architectures and systems:

+ Novel systems/platforms for efficient acceleration based on FPGA, GPU, and other devices
+ Heterogeneous processors/systems for scalable, high-performance, high-reliability and/or low-power computation
+ Reconfigurable/configurable hardware and systems including IP-cores, embedded systems, SoCs and cluster/grid/cloud computing systems for scalable, high-performance and/or low-power processing
+ High-performance custom-computing processors/systems
+ Novel architectures and device technologies that can be applied to efficient acceleration, including many-core architectures, NoC architectures, 3D-stacking technologies and optical devices

Software and applications:

+ Novel applications for efficient acceleration systems/platforms, and custom computing
+ System softwares, compilers and programming languages for efficient acceleration systems / platforms, including many-core processors, GPUs, FPGAs and other reconfigurable /custom processors
+ Run-time techniques for acceleration, including Just-in-Time compilation and dynamic partial-reconfiguration
+ Performance evaluation and analysis for efficient acceleration
+ High-level synthesis and design methodologies for heterogeneous, reconfigurable and/or custom processors/systems

As in previous HEART editions, we plan to publish selected accepted papers at HEART 2013 in post-proceedings of **ACM SIGARCH Computer Architecture News (CAN)**.

All contributions must be submitted electronically in PDF format (two columns, US letter size, single-spacing, 10 points for main body text) and be no more than 6 pages in length. For double-blind review, manuscripts must NOT identify the authors in any way, so author names, affiliations, e-mail addresses and self-references should be blanked out. You can submit your contribution(s) through the following link:
https://www.easychair.org/conferences/?conf=heart2013

Each accepted paper MUST have at least one author with a paid registration for the manuscript to be included and published in the symposium proceedings and ACM SIGARCH CAN post-proceedings. Authors are also expected to attend and present the paper at the symposium.

Keynote lectures:

+ **Mr. Ken Chapman**, Xilinx Inc. Senior Staff Engineer, Applications Specialist
  "Highly Efficient Designs: Art, Magic or Engineering?"
+ **Prof. David Broman**, UC Berkeley / Linkoping University,
  "Execution time should be as short as possible, but not shorter"

Further information can be found at: http://www.eng.ed.ac.uk/HEART2013/
If you require any more information, please contact us: heart2013@eng.ed.ac.uk

Important Dates (all 23:59, GMT):

Paper submission	March 11, 2013	<EXTENDED>
Author notification	April 15, 2013	
Camera-ready due	April 30, 2013	
Symposium dates	June 13 to 14, 2013	