COSMIC

international workshop on Code OptimiSation for MultI and many Cores

Austin, TX – February 4 or 5, 2017

held in conjunction with the
International Symposium on Code Generation and Optimization (CGO) 2017

Website: http://workshops.inf.ed.ac.uk/cosmic/cosmic17

CALL FOR PAPERS

Many-core architectures, such as mobile SOCs, GPGPUs, and deep learning accelerators, are quickly becoming the norm in computing devices and consumer electronics. The community sees this development as an essential step in sustaining the exponential growth of performance in an energy efficient way, but at present there is no consensus on how software can make best use of it. Developing parallel applications often starts with an existing sequential implementation. A key problem is how to discover the parallelism potentially available and then convert it into a form that can be exploited. Once we have a parallel implementation, its performance and energy efficiency largely depend on how it is mapped to the available hardware. Given that hardware is increasingly diverse and heterogeneous, and that in the era of dark silicon energy efficiency affects the availability of hardware, how can this re-mapping be best achieved. Solutions to these two problems form the core topic of COSMIC'17. Research papers on innovative techniques and experience papers on insights obtained by experimenting with real-world systems and applications are both welcome.

TOPICS OF INTEREST:
This workshop aims at examining different solutions to these problems and includes (but is not limited to):
- programming languages and models
- compilers and tools
- runtime systems
- operating systems
- binary translation
- combinations of the above
for homogeneous, heterogeneous multi-core and many-core based systems.

Regular research papers and work-in-progress short papers are welcome.

IMPORTANT DATES

Submission: November 27, 2016 – Anywhere on Earth
Author Notification: December 20, 2016
Workshop: February 4 or 5, 2017

SUBMISSION INFORMATION

To encourage submissions, we accept two types of papers:
- Full papers: a full paper that consists of up to ten (10) pages of content and references using a double-column format.
- Position papers: a one (1) page abstract of on-going work that is related to the themes of COSMIC.

The submission should include the author name, affiliation and email address.

Format:
Submissions must be in ACM proceedings format and 10-point font size. We highly recommend the use the templates provided by SIGPLAN:
http://www.acm.org/sigs/publications/proceedings-templates

Submissions must be in PDF, printable on US Letter and A4 sized paper.

Submission website:
https://easychair.org/conferences/?conf=cosmic2017

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