

The Third International Workshop on Parallelism in Mobile Platforms



Portland, OR, USA June 14, 2015

<http://prism.sejong.ac.kr>

In conjunction with the 42nd International Symposium on Computer Architecture (ISCA-42)

CALL FOR PAPERS

One of the most important principles in designing today's computing systems is to exploit *parallelism*. Mobile platforms are no exception and we find increasingly more instances of the use of parallelism in them. At the hardware level, there are: multiple processor cores, GPGPU, accelerators, multiple banks of memory, multiple channels to non-volatile memory chips, and multiple radios, to name a few. At the software level, parallel and concurrent threading techniques are commonly employed to improve responsiveness and throughput in the OS and applications alike. We anticipate that future mobile platforms will make more extensive and creative use of parallelism.

This workshop focuses on how parallelism is, and can be, utilized in hardware, software and their interaction in order to improve the user experiences with mobile platforms. Topics of particular interest include, but are not limited to:

- Emerging parallel application processor architectures and hardware features in mobile platforms;
- Compelling future applications on mobile platforms that call for unprecedented parallelism;
- Mobile GPGPU architectures and programming models;
- Hardware accelerators for mobile applications;
- Storage architectures in mobile platforms;
- Radio and networking architectures in mobile platforms;
- Compiler support for parallel mobile platforms;
- OS support to accommodate and promote parallelism in mobile platforms;
- Experiences in parallel mobile applications development;
- Novel techniques to improve responsiveness by exploiting parallelism;
- Novel techniques to improve performance/energy by exploiting parallelism;
- Mobile platform performance evaluation methodologies;
- Application benchmarks for mobile platforms;
- Characterization of emerging workloads on mobile platforms; and
- Impact and interaction of emerging technologies to mobile platforms

Organizers

Sangyeun Cho, Samsung Electronics
Hyesoon Kim, Georgia Tech.
Hsien-Hsin Lee, Georgia Tech.
Giho Park, Sejong Univ.
Vijay Janapa Reddi, UT Austin

Web Chair

Minkwan Kee, Hyunsoo Sun, Sejong Univ.

Program Committee

Murali Annavaram, USC
Jesse Beu, ARM
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Calin Cascaval, Qualcomm
Koji Inoue, Kyushu Univ.
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Trevor Mudge, Univ. of Michigan
Vijay Janapa Reddi, UT Austin
Chulho Shin, LG Electronics
Youngmin Shin, Samsung Electronics
Guangyu Sun, Peking Univ.
Michael Taylor, UCSD

The workshop aims at providing a forum for researchers, engineers and students from academia and industry to discuss their latest research in designing mobile platforms and systems, to bring their ideas and research problems to the attention of others, and to obtain valuable and instant feedback from fellow researchers.

SUBMISSION GUIDELINE

Submit a 2-page presentation abstract to a web-based submission system (TBA) by March 31, 2015. Notification of acceptance will be sent out by April 22, 2015. Final presentation material (to be posted on the workshop web site) due June 4, 2015. For additional information regarding paper submissions, please contact the organizers.

IMPORTANT DATES

- Abstract submission
- Author notification
- Final camera-ready paper
- Workshop

March 31, 2015
April 22, 2015
June 4, 2015
June 14, 2015