

# The Fourth International Workshop on Parallelism in Mobile Platforms



Seoul, Korea June 18, 2016

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

In conjunction with the 43<sup>rd</sup> International Symposium on Computer Architecture (ISCA-43)

## 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/IoT applications;
- Storage architectures in mobile/IoT platforms;
- Radio and networking architectures in mobile/IoT 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/IoT platform performance evaluation methodologies;
- Application benchmarks for mobile/IoT platforms;
- Characterization of emerging workloads on mobile/IoT platforms;
- IoT Enabling technologies (smart sensors, energy harvesting, sensor networks, etc.);

## 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, SeungJin Lee,  
Sejong Univ.

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 April 17, 2016. Notification of acceptance will be sent out by May 5, 2016. Final presentation material (to be posted on the workshop web site) due June 6, 2016. For additional information regarding paper submissions, please contact the organizers.

## IMPORTANT DATES

- |                            |                       |
|----------------------------|-----------------------|
| • Abstract submission      | <b>April 17, 2016</b> |
| • Author notification      | <b>May 5, 2016</b>    |
| • Final camera-ready paper | <b>June 6, 2016</b>   |
| • Workshop                 | <b>June 18, 2016</b>  |