3rd Workshop on SoCs, Heterogeneous Architectures and Workloads (SHAW-3)

Feb 26th 2012, New Orleans, Louisiana, USA
Held in conjunction with HPCA-18

Organizing Chairs:

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Advance Program:

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08:30	08:45	**Welcome to SHAW 2012**		
08:45	09:15	**Embedded Sports Technology: Taking it to the Field (Invited Talk)**	**Priya Narasimhan**	CMU
09:15	09:40	Programmable Accelerators for Brain-inspired Vision	Srinidhi Kestur, Jagdish Sabarad, Misun Park, Kevin Irick, Vijay Narayanan	Dept. of Computer Science and Engineering, Pennsylvania State University, PA
09:40	10:05	A Mobile Accelerator Architecture for Ray Tracing	Josef Spjut, Daniel Kopta, Erik Brunvand, and Al Davis	School of Computing at the University of Utah, Salt Lake City, UT
10:05	10:30	Overcoming Register File Inefficiencies by Using 2D Broadcast Bus Interconnects in Linear Algebra Accelerators	Ardavan Pedram, Robert van de Geijn, Andreas Gerstlauer	UT Austin
10:30	11:00	Break		
11:00	11:30	**The practical challenges of Heterogeneous Architectures (Invited Talk)**	**Ronny Ronen**	Intel Labs
11:30	11:55	Supporting Transparent Thread Assignment in Heterogeneous Multicore Processors Using Reinforcement Learning	Xiaolei Yan and Amy McGovern & Lina Sawalha and Ronald D. Barnes	School of Computer Science & School of Electrical and Computer Engineering The University of Oklahoma
11:55	13:00	Lunch break		
13:00	14:15	**Poster Session**		
14:15	14:40	Extending the Dynamic Power Range of Client Devices using Heterogeneous Processors	Vishal Gupta*, Paul Brett, David Koufaty, Dheeraj Reddy,Karsten Schwan* , Scott Hahn, and Ganapati Srinivasa	*Georgia Institute of Technology, Atlanta, GA, Intel Corporation, Hillsboro, OR
14:40	15:05	Exploration of Memory Hierarchy for Heterogeneous Computing Architecture	Imran Vakil, Peilong Li, Yan Luo, Omer Khan	Dept. of Electrical and Computer Engineering, University of Massachusetts Lowell
15:05	15:30	Break		
15:30	16:00	**The Smart Phone and New Opportunities for Near Field Communication (NFC) (Invited Talk)**	**Roy Want**	Google Research
16:00	16:25	Challenges in Heterogeneous Die-Stacked and Off-Chip Memory Systems	Gabriel H. Loh, Nuwan Jayasena, Jaewoong Chung, Steven K. Reinhardt, J. Michael O'Connor, Kevin McGrath	AMD Research
16:25	16:50	Run-time Image and Video Resizing Using CUDA-enabled GPUs	Ronald Duarte and Resit Sendag	Department of Electrical and Computer and Biomedical Engineering, University of Rhode Island, Kingston, RI
16:50	17:15	Benchmarking Next Generation Hardware Platforms: An Experimental Approach	Vishakha Gupta, Adit Ranadive, Ada Gavrilovska, Karsten Schwan	Intel Labs & Georgia Institute of Technology

Workshop URL: http://www.ece.lsu.edu/hpca-18/shaw-3/