

Raid Ayoub

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Education:

Ph.D. candidate at the CSE department, University of California at San Diego, (Fall 2004 - present).
M.S and **B.S.** in Electrical Engineering, University of Technology, Baghdad/Iraq.

Research interest:

Energy and thermal management at the data center, operating system and microarchitectural levels.

Publications:

- R. Ayoub, K. R. Indukuri and T. Rosing. **Energy Efficient Proactive Thermal Management in Memory Subsystem.** To appear in *ISLPED*, 2010.
- R. Ayoub, S. Sharifi and T. Rosing. **GentleCool: Cooling Aware Proactive Workload Scheduling in Multi-Machine Systems.** *DATE*, 2010.
- R. Ayoub, and T. Rosing. **Cool and Save: Cooling Aware Dynamic Workload Scheduling in Multi-socket CPU Systems.** *ASP-DAC*, 2010.
- R. Ayoub and A. Orailoglu. **Performance and Energy Efficient Cache Migration Approach for Thermal Management in Embedded Systems.** *GLSVLSI*, 2010.
- R. Ayoub, and T. Rosing. **Predict and act: dynamic thermal management for multi-core processors.** *ISLPED*, 2009.
- G. Dhiman, R. Ayoub, and T. Rosing. **PDRAM: A Hybrid PRAM and DRAM Main Memory System.** *DAC* 2009.
- R. Ayoub and A. Orailoglu. **Filtering Global History: Power and Performance Efficient Branch Predict.** *ASAP* 2009.
- R. Ayoub and A. Orailoglu. **Power efficient register file update approach for embedded processors.** *ICCD*, 2007.
- R. Ayoub, A. Orailoglu. **Low Power Branch Predictor for Application Specific Processors.** *WASP*, 2005.
- R. Ayoub, A. Orailoglu. **A Unified Transformational Approach for Reductions in Fault Vulnerability, Power, and Crosstalk Noise & Delay on Processor Buses.** *ASP-DAC*, 2005.
- R. Ayoub, P. Petrov and A. Orailoglu. **Instruction Memory Transformations for reductions in Power and Fault Vulnerability on Embedded Processors.** *SOCC*, 2004.

Internships:

Intel labs (spring 2010)

- Power aware optimizations for multi-core processor systems

Cisco (Summer 2007)

- Power aware estimation and optimizations at the microarchitectural and RTL levels

Teaching Assistant:

University of California at San Diego/CSE department

Components and design techniques for digital systems CSE140, Digital Systems Laboratory, CSE140L, Introduction to computer architecture, CSE 141, Computer architecture Lab, CSE 141L, VLSI Testing, CSE241, C programming, CS 5a

Resident status in US: US citizen