Grégory Vaumourin

PhD Student at CEA-LIST and INRIA Bordeaux (France)

Topic of Research

- Memory Systems : Cache Managemement Techniques for Energy Consumption Reduction and Cache Coherence Optimizations
- Compilation analysis and data locality optimization in GCC
- Data locality metrics for working set analysis
- Simulations and energy consumption modeling of the memory hierarchy in Gem5
- Emerging memory technologies

Education

2013-Now **PhD student** at CEA, Architecture and IC Design, Embedded Software Department – Saclay (France) and INRIA Bordeaux (France)
Subject : Hybrid Memory Hierarchy and dynamic data management for embedded multi-core architectures

2013 **Internship at CEA-LETI** : Participation in the national research project **GRECO** (GReen wireless Communicating Object) targetting low-power communicating networks. Developpement in the **WSNet simulator** for an industrial use-case simulation of an energy harvesting wireless sensor network (EH-WSN)

2012-2013 **Computer Science** – Luleå University of Technology – Luleå (Sweden)
Exchange program during 1 semester

2008-2013 **Computer engineering** at National Institute of Applied Science (INSA) – Rennes (France)
Engineer's degree (master/bachelor equivalent) in Electronic and Computer Science

Scientific Publication

2016 **Specific Read-only Data Management for Memory System Optimization**
Vaumourin G., Dombek T., Guerre A., Barthou D.
The 24th Euromicro International Conference on Parallel, Distributed and Network-Based Processing (PDP'16)

2016 **Co-simulating complex energy harvesting WSN applications: an in-tunnel wind powered monitoring example**
Le Quang V., Didioui A., Vaumourin G., Bernier C., Broekaert F., Fritsch A.
International Journal of Sensor Networks (IJSNet)

2014 **Specific read only data management for memory hierarchy optimization**
Vaumourin G., Dombek T., Guerre A., Barthou D.
EWiLi'14, The 4th Embedded Operating Systems Workshop [**pdf**]

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