Mickaël Dardaillon

Education

2014	**Doctorate degree**, *INSA Lyon*, Computer Science.	
2011	**Master degree**, *Université d'Orléans*, Electrical Engineering.	
2011	**Engineer degree**, *Polytech'Orléans*, Electrical Engineering.	

Experience

2014–2015	**Research Intern (ongoing)**, *Nokia Technologies*, Berkeley, California. Implementation of LTE-Advanced protocol on FPGA and manycores.
2011–2014	**PhD Student**, *CITI-Inria, INSA Lyon & CEA, LETI*, Lyon & Grenoble, France. Compilation for Parametric Dataflow targeting MPSoC.
2011	**Research Intern**, *CITI-Inria, INSA Lyon*, Lyon, France. Implementation of cryptographic primitives on wireless sensor node.
2010	**Engineer Intern**, *FH Electronics*, Orléans, France. Design of electronic fuel injection control board.

Teaching

Undergraduate	**Architecture, Algorithmic and Databases.**	*Lab teaching and examination design*

Skills

Hardware	**Design and implementation.**	*Experiments on FPGA technology*
Compilation	**Back-end for heterogeneous MPSoC.**	*Complete design and implementation*
Network	**CAN, SPI, 802.15.4, LTE-Advanced.**	*PHY layer development*
Modeling	**Dataflow model of computation.**	*Theory and implementation in a compiler*
Application	**Signal processing, Software Defined Radio, Cryptography.**	

Languages

French	**Native**	
English	**Fluent**	*1 semester at University of Texas at Dallas*

2075 Allston Way – Berkeley 94704, United States
📞 +1 510 480 5456 • ✉ mickael.dardaillon@gmail.com
🖥 dardarel.github.io • 🔗 mickael.dardaillon

Publications

Thesis manuscript

2014   Mickaël Dardaillon. "Compilation d'application flot de données paramétriques pour MPSoC dédiés à la radio logicielle". PhD thesis. Lyon, France: INSA Lyon, Nov. 2014

Book chapters

2014   Mickaël Dardaillon, Kevin Marquet, Tanguy Risset, Jérôme Martin, and Henri-Pierre Charles. "Cognitive Radio Programming Survey". In: *Handbook of Research on Software-Defined and Cognitive Radio Technologies for Dynamic Spectrum Management*. Ed. by Naima Kaabouch and Wen-Chen Hu. IGI Global, Oct. 2014

International conferences

2014   Mickaël Dardaillon, Kevin Marquet, Tanguy Risset, Jérôme Martin, and Henri-Pierre Charles. "A Compilation Flow for Parametric Dataflow: Programming Model, Scheduling, and Application to Heterogeneous MPSoC". in: *International Conference on Compilers, Architecture and Synthesis for Embedded Systems (CASES)*. New Delhi, India, Oct. 2014

2012   Mickaël Dardaillon, Cédric Lauradoux, and Tanguy Risset. "Hardware implementation of the GPS authentication". In: *International Conference on Reconfigurable Computing and FPGAs (ReConFig)*. Cancun, Mexico, Dec. 2012, pp. 1–6

Mickaël Dardaillon, Kevin Marquet, Tanguy Risset, and Antoine Scherrer. "Software defined radio architecture survey for cognitive testbeds". In: *International Wireless Communications and Mobile Computing Conference (IWCMC)*. Limassol, Cyprus, Aug. 2012, pp. 189–194

Research report

2013   Mickaël Dardaillon, Kevin Marquet, Jérôme Martin, Tanguy Risset, and Henri-Pierre Charles. *Cognitive Radio Programming: Existing Solutions and Open Issues*. Tech. rep. 8358. Inria, Sept. 2013. URL: http://hal.inria.fr/hal-00859467

National conferences and workshops

2014   Mickaël Dardaillon, Kevin Marquet, Tanguy Risset, Jérôme Martin, and Henri-Pierre Charles. "Contrôle d'application flot de données pour les systèmes sur puces : étude de cas sur la plateforme Magali". In: *Conférence en Parallélisme, Architecture et Système (ComPAS)*. Neuchâtel, Switzerland, Apr. 2014

Mickaël Dardaillon, Kevin Marquet, Tanguy Risset, Jérôme Martin, and Henri-Pierre Charles. "Compilation for heterogeneous SoCs : bridging the gap between software and target-specific mechanisms". In: *Workshop on High Performance Energy Efficient Embedded Systems at the international conference on High Performance and Embedded Architecture and Compilation (HiPEAC)*. Vienna, Austria, Jan. 2014

2013   Mickaël Dardaillon, Kevin Marquet, Tanguy Risset, Jérôme Martin, and Henri-Pierre Charles. "Machine Virtuelle pour la Radio Cognitive". In: *École d'hiver Francophone sur les Technologies de Conception des Systèmes embarqués Hétérogènes (FETCH)*. Leysin, Switzerland, Jan. 2013