Gianluca Durelli

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24040 Misano di Gera d'Adda (BG) - Italy
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Education

01/2013 - to date
PhD Candidate in Computer Science and Engineering, *Politecnico di Milano, Milano (Italy)*.

09/2009 - 04/2012
Master of Science in Computer Engineering, *Politecnico di Milano, Milano (Italy)*, 110/110.
Thesis A^2B Application to bitstream: A semi-automated flow for reconfigurable MPSoC creation

08/2010 - 04/2011
Erasmus Exchange Student - Master of Science in Computer Science, *Uppsala Universitet, Uppsala (Sweden)*.

09/2006- 09/2009
Bachelor of Science in Computer Engineering, *Politecnico di Milano, Milano (Italy)*, 106/110.
Thesis Bebot: autonomous exploration and environmental analysis based on FPGA

Work Experience

06/2014 - to date
Summer intern, *Summer internship in IBM High Performance Analytics group under the supervision of Fabrizio Petrini*, IBM T.J. Watson Research Center - Yorktown Heights (NY).

03/2014 - 06/2014
Teaching assistant, *Laboratory sessions for Informatica e Fondamenti di Informatica Medica, taught by Prof. Marco D. Santambrogio*, Politecnico di Milano - Milano - Italy.

12/2013 - 01/2014
Teaching assistant, *Laboratory sessions for Informatica B, taught by Prof. Daniele Loiacono*, Politecnico di Milano - Milano - Italy.

07/2013 - 11/2013
Summer intern, *Summer internship in IBM High Performance Analytics group under the supervision of Fabrizio Petrini*, IBM T.J. Watson Research Center - Yorktown Heights (NY).

3/2013 - 6/2013	**Teaching assistant**, *Laboratory sessions for Informatica e Fondamenti di Informatica Medica, taught by Prof. Marco D. Santambrogio*, Politecnico di Milano - Milano - Italy.
10/2012 - 1/2013	**Teaching assistant**, *Laboratory sessions for Fondamenti di Informatica, taught by Prof. Francesco Bruschi*, Politecnico di Milano - Milano - Italy.
10/2012 - 1/2013	**Teaching assistant**, *Laboratory sessions tutor for Informatica B*, Politecnico di Milano - Milano - Italy.
10/2012 - 12/2012	**Web developer**, *Development of a dynamic website to support learning of programming languages*, METID - Politecnico di Milano - Milano - Italy.
03/2012 - 07/2012	**Teaching assistant**, *Laboratory sessions tutor for Prova Finale (Ingegneria del Software), taught by Prof. Carlo Ghezzi*, Politecnico di Milano - Milano - Italy.
06/2010 - 10/2010	**Web developer**, *Development of a dynamic website aimed at managing football tournaments (http://sportland.milano.it)*, Fubles SRL- Via Mascheroni, 14 - 20145 Milano - Italy.

Languages

Mother Language	**Italian**.
Others:	**English**.
	Self evaluation: Listening: C1, Reading: C1, Speaking Production: B2, Speaking Interaction: B2, Writing: B2.
	Certification: TOEFL IBT (2009): 97/120.

Computer Skills

Operating Systems: Windows, Linux.
Programming Languages: C, C++, Java, C#, PythonLinux.
Scripting Languages: Bash (Basic Knowledge).
Hardware Description Languages: VHDL, Verilog (Basic Knowledge).
SQL: MySQL, Sqlite.
Web development: HTML, PHP, CSS, JQuery, Websocket.

Interests

Sport(soccer, running), Books, Music

Selected Publications

Riccardo Cattaneo, Riccardo Bellini, Gianluca Durelli, Christian Pilato, Marco D. Santambrogio, and Donatella Sciuto. Para-sched: A reconfiguration-aware scheduler for reconfigurable architectures. In *Proceedings of the 2014 IEEE International Parallel & Distributed Processing Symposium Workshops*, pages 243–250, 2014.

G. Durelli, M. Coppola, K. Djafarian, G. Kornaros, A. Miele, M. Paolino, Oliver Pell, Christian Plessl, M.D. Santambrogio, and C. Bolchini. Save: Towards efficient resource management in heterogeneous system architectures. In *Reconfigurable Computing: Architectures, Tools, and Applications*, pages 337–344, 2014.

Gianluca Durelli, Fabrizio Spada, Riccardo Cattaneo, Christian Pilato, Danilo Pau, and Marco D. Santambrogio. Adaptive raytracing implementation using partial dynamic reconfiguration. In *Proceedings of the 2014 IEEE International Parallel & Distributed Processing Symposium Workshops*, pages 236–242, 2014.

Gianluca C. Durelli, Marcello Pogliani, Antonio Miele, Christian Plessl, Heinrich Riebler, Marco D. Santambrogio, Gavin Vaz, and Cristiana Bolchini. Runtime resource management in heterogeneous system architectures: The save approach. In *Parallel and Distributed Processing with Applications (ISPA), 2014 IEEE International Symposium on*, pages 142–149, 2014.

Davide B Bartolini, Riccardo Cattaneo, Gianluca C Durelli, Martina Maggio, Marco D Santambrogio, and Filippo Sironi. The autonomic operating system research project: achievements and future directions. In *Proceedings of the 50th Annual Design Automation Conference*, page 77. ACM, 2013.

DB Bartolini, F Sironi, M Maggio, GC Durelli, D Sciuto, and MD Santambrogio. Towards a performance-as-a-service cloud. In *Proceedings of the 4th annual Symposium on Cloud Computing*, page 26. ACM, 2013.

Riccardo Cattaneo, Christian Pilato, Gianluca C Durelli, Marco D Santambrogio, and Donatella Sciuto. Smash: A heuristic methodology for designing partially reconfigurable mpsocs. In *Rapid System Prototyping (RSP), 2013 International Symposium on*, pages 102–108. IEEE, 2013.

Gianluca Durelli, Alessandro A Nacci, Riccardo Cattaneo, Christian Pilato, Donatella Sciuto, and Marco D Santambrogio. A flexible interconnection structure for reconfigurable fpga dataflow applications. In *Proceedings of the 2013 IEEE 27th International Symposium on Parallel and Distributed Processing Workshops and PhD Forum*, pages 192–201. IEEE Computer Society, 2013.

Christian Pilato, Riccardo Cattaneo, Gianluca Durelli, Alessandro Antonio Nacci, Marco Domenico Santambrogio, and Donatella Sciuto. A2b: An integrated framework for designing heterogeneous and reconfigurable systems. In *Adaptive Hardware and Systems (AHS), 2013 NASA/ESA Conference on*, pages 198–205. IEEE, 2013.

Alessandra Bonetto, Andrea Cazzaniga, Gianluca Durelli, Christian Pilato, Donatella Sciuto, and Marco D Santambrogio. An open-source design and validation platform

for reconfigurable systems. In *Field Programmable Logic and Applications (FPL), 2012 22nd International Conference on*, pages 707–710. IEEE, 2012.

Alessandra Bonetto, Andrea Cazzaniga, Gianluca C Durelli, Christian Pilato, Donatella Sciuto, and Marco D Santambrogio. Tabit: A framework for task graph to bitstream generation. In *Embedded Computer Systems (SAMOS), 2012 International Conference on*, pages 201–208. IEEE, 2012.

Andrea Cazzaniga, Gianluca Durelli, Christian Pilato, Donatella Sciuto, and Marco D Santambrogio. On the development of a runtime reconfigurable multicore system-on-chip. In *Digital System Design (DSD), 2012 15th Euromicro Conference on*, pages 132–135. IEEE, 2012.

Gianluca Durelli, Federica Cresci, Donatella Sciuto, Mario Porrmann, and Marco D Santambrogio. Mini-robot's performance optimization via online reconfiguration and hw/sw task scheduling. In *Parallel and Distributed Processing Symposium Workshops & PhD Forum (IPDPSW), 2012 IEEE 26th International*, pages 437–442. IEEE, 2012.

Gianluca Durelli, Christian Pilato, Andrea Cazzaniga, Donatella Sciuto, and Marco D Santambrogio. Automatic run-time manager generation for reconfigurable mpsoc architectures. In *Reconfigurable Communication-centric Systems-on-Chip (ReCoSoC), 2012 7th International Workshop on*, pages 1–8. IEEE, 2012.

Christian Pilato, Andrea Cazzaniga, Gianluca Durelli, Andres Otero, Donatella Sciuto, and Marco D Santambrogio. On the automatic integration of hardware accelerators into fpga-based embedded systems. In *Field Programmable Logic and Applications (FPL), 2012 22nd International Conference on*, pages 607–610. IEEE, 2012.

MD Santambrogio, D Pnevmatikatos, K Papadimitriou, C Pilato, G Gaydadjiev, D Stroobandt, T Davidson, T Becker, T Todman, W Luk, et al. Smart technologies for effective reconfiguration: The faster approach. In *Reconfigurable Communication-centric Systems-on-Chip (ReCoSoC), 2012 7th International Workshop on*, pages 1–7. IEEE, 2012.