Personal information

Surname(s) / First name(s)	**CATTANEO Riccardo**
Address(es)	27, Viale 4 Novembre, Lodi (LO), 26900, ITALY
Telephone(s)	+390371495195 Mobile: +393935142447
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Email(s)	riccardo.cattaneo@polimi.it, riccardo@bottega52.it
Nationality(-ies)	Italian
Date of birth	29/09/1987
Gender	Male

Work experience

Dates	01/12/2014 – to date
Occupation or position held	**Co-Founder and CEO of Bottega52 S.R.L.**
Main activities and responsibilities	Bottega52 is the effort of myself and that of my two other PhD colleagues to translate our respective research competencies into market products by developing novel products and processes. Website: http://www.bottega52.it
Name and address of employer	Bottega52 S.R.L. – Lodi, Italy
Type of business or sector	Information and technology

Dates	01/07/2015 – to date
Occupation or position held	**Co-Founder, Business Development & Strategy of Sofia S.R.L.**
Main activities and responsibilities	In Sofia we are developing multiple products related to smart hotels, smart work spaces, and smart homes. Thanks to the startup accelerator TIM Working Capital, that invested in our company with a first 25 k€ seed, we are currently in the early prototype and customer development phase. My role involves Business Development and Strategy. Website: http://www.sofiasmartliving.com
Name and address of employer	Sofia S.R.L. – Lodi, Italy
Type of business or sector	Smart Spaces

Dates	2014 – 2015
Occupation or position held	**Co-Founder of Skrlla Inc.**
Main activities and responsibilities	Software & Hardware Engineer. I co-developed both the frontend and backend of the micropayments platform. Website: http://www.skrlla.com
Name and address of employer	Skrlla Inc. – San Francisco, CA, US
Type of business or sector	Information and technology

Dates	01/03/2008 – 30/10/2009
Occupation or position held	**IT Responsible**
Main activities and responsibilities	Assistance was given to employees in a number of ordinary office functions: from setting up of their machines, to configuration of small internetworking services, to email configuration. Left the position in order to better focus on academic activities.
Name and address of employer	Nuovoprogramma s.s.s – Melegnano (Italy)
Type of business or sector	Information and technology consulting

Volunteer work

2009 – 2014	Member of the Rotaract International. Held Treasurery Officer and President positions.

Education and training

Dates	18/02/2013 – 22/04/2013
Title of qualification awarded	**Visiting PhD Student**
Principal subjects / occupational skills covered	My main activity revolves around the development of a toolchain to rapidly explore different alternative hardware design solutions, targeting FPGA platforms. Particular emphasis was put on devices with partially reconfiguration capabilities.
School or University	Imperial College of London
International Classification Level	ISCED 6

Dates	01/05/2012 – today
Title of qualification awarded	**European PhD Candidate**
Principal subjects / occupational skills covered	My main activity revolves around the development of an FPGA based platform and related tools (programming language features, compiler and code optimization, runtime support, hardware/software interfaces) to enable fast development of high performance computing systems. Particular emphasis is put on the acceleration of stencil-like workloads, and comparison with GPU architectuers.
	I am currently involved in exaFPGA. I've been involved as PhD Student and lead developer in FASTER EU FP7. During this period, and in relationship with this project, I went to Imperial College of London for a research stay.
School or University	Politecnico di Milano (University) Piazza Leonardo da Vinci 32, 20133 Milano (Italy)
International Classification Level	ISCED 6

Dates	23/02/2010 – 23/04/2012
Title of qualification awarded	**Laurea Specialistica in Ingegneria Informatica (MSCE)**, final mark 108/110
Principal subjects / occupational skills covered	Participated to DOSE Project (Distributed and Offshore Software Engineering), a project involving some european and asian universities with the aim of developing the attitude of participants to team work, in particular with teams located in a geographically remote place.
	Thesis title: Operating System Support for Adaptive Thermal and Performance Management. In this work it is proposed an advancement in the context of operating system–based, local Dynamic Thermal Management (DTM) technique deeply rooted in the Autonomic Computing (AC) initiative called ADAPTME, a simultaneously performance and thermal aware scheduler aimed at server environments with general purpose (both batch and interactive) workloads.
	Concentrations: subjects related to applied artificial intelligence, software engineering, formal methods, robotics, computer architectures, computer vision and operating systems.
School or University	Politecnico di Milano (University) Piazza Leonardo, 20133 Milano (Italy)
International Classification Level	ISCED 5

Dates	22/08/2010 – 20/12/2010
Title of qualification awarded	**Master of Science in Computer Science (MSCS)**, final mark 3.71/4
Principal subjects / occupational skills covered	I've been involved in numerous projects related to applied AI and Computer Vision.
	The double degree between Politecnico di Milano/University of Illinois at Chicago requires the student to take the canonical 7 exams (plus final thesis) of the MS in Computer Science. GPA: 3.71/4
	My focus was set on expert systems, computer vision, neural networks, applied artificial intelligence, computer security and less relevantly on wavelets and analysis of stochastic and non stationary signals.
School or University	University of Illinois at Chicago (University), 60612 Chicago (IL, USA)
International Classification Level	ISCED 5

Dates	01/09/2006 – 22/02/2010
Title of qualification awarded	**Laurea in Ingegneria Informatica (BSCS)**, final mark 99/110

Principal subjects / occupational skills covered	Thesis title: A 6DOF IMU and sEMG based device and its applications. An Inertial Motion Unit and electromyography-based device is studied in order to control in a very natural and intuitive manner an end-effector in an augmented/virtual reality environment. A prototype is produced in order to validate the idea. Validation is carried out in the Virtools AR environment in the context of rapid prototyping. Concentrations: informatics, analog and digital electronics, software engineering, databases, networks, knowledge engineering, robotics and automation.
School or University	Politecnico di Milano (University) Piazza Leonardo da Vinci, 20133 Milano (Italy)
International Classification Level	ISCED 5
Dates	10/09/2001 – 25/07/2006
Title of qualification awarded	Maturità scientifica, final mark 90/100
School or University	Liceo Scientifico G.Gandini (High School) 26900 Lodi (Italy)
International Classification Level	ISCED 3

Personal skills and competences

Social skills and competences	I do have a **strong vocation towards team work**, developed and demonstrated through the participation to curricular and extracurricular activities like team projects, the Rotaract International activities, and the exaFPGA project, mostly as team leader. More recently, this has been demonstrated through the foundation of multiple profitable companies. I chose to follow the classes for foreigner students of both master degrees (part of them abroad in U.S.) in order to get in touch with different cultures, people and attitudes, learning to adapt to multicultural environments. I particularly enjoyed my long stays at **Chicago and London**, which exposed myself to radically different mindsets than mine. Additionally, as a **co-founder of multiple companies**, it is my regular duty to engage customers and propose our services and products in order to improve their businesses.
Organizational skills and competences	As part of my **PhD, I am the project leader of exaFPGA, a project involving 5 people** (5 master's student, currently working towards their graduation, and 10 people working on specific aspects of the grand project, exaFPGA. 15 other students already worked on smaller, specific aspects of the same project in the near past, under my guidance. I have also developed some team management basics in a very practical manner by holding the office of **President of the Rotaract Club of S.Giuliano Milanese** for the social year 2012/2013.
Technical skills and competences	Most recent hands-on projects were related to **mobile & distributed programming, FPGA development and GPGPU programming**. Languages and tools: C (solid knowledge), C++ (good knowledge), Python (good knowledge), CUDA (good knowledge), Swift (good knowledge), VHDL (basic knowledge), MATLAB (good knowledge of language, some knowledge about specific toolboxes), SQL Standard (sufficient knowledge), bash (good knowledge) and Xilinx Platform Studio/Vivado (good knowledge). Proficient use of the most frequently used *NIX command line tools. Regular use of git versioning system. I'm currently studying Scala for business purposes, and Polyhedral Analysis for academic purposes. Operating systems: Microsoft Windows (XP, Vista, 7), Apple OS X, various Linux flavors, FreeBSD. Some knowledge of kernel programming (mostly FreeBSD).

Professional Development Training and Projects

InnoTal	I participated to **InnoTal**, a project in collaboration with **Assolombarda** aimed at facilitating the access to the labor market to PhD students from the 260 graduate schools in Lombardy through the **enhancement and promotion of talents**. It offers training courses aimed at developing professional perspectives and connections with the world of business and contributes to the development of entrepreneurial skills for the creation of autonomous organizational solutions to support the enterprise.
Italialab	I participated to **Italialab**, a laboratory for collaborative innovation and **corporate venturing devised by the ELIS Consortium** in partnership with Italtel, consisting of 100 professionals from the Italian ICT companies and universities, organized into groups and inter-led projects to develop ability and competencies to innovate in the digital market, Made in Italy.

Publications

International conferences

F. Spada, A. Scolari, G. C. Durelli, D. N. P. RICCARDO CATTANEO, G. N. Gaydadjiev, O. Pell, A. Brokalakis, W. Luk, D. Pau, D. Stroobandt, D. Sciuto, and M. D. Santambrogio, "Fpga-based design using the faster toolchain: the case of stm spear development board," *International Symposium on Parallel Architectures (ISPA)*, 2014

D. Pagano, M. Vuka, M. Rabozzi, R. Cattaneo, D. Sciuto, and M. D. Santambrogio, "Thermal-aware floorplanning for partially-reconfigurable fpga-based systems.," in *DATE*, pp. 920–923, 2015

D. B. Bartolini, R. CATTANEO, G. Durelli, M. Maggio, M. D. Santambrogio, and F. Sironi, "The autonomic operating system project - achievements and future directions," *Design Automation Conference (DAC)*, 2013

C. Pilato, R. CATTANEO, G. Durelli, A. A. Nacci, M. D. Santambrogio, and D. Sciuto, "A2b: an integrated framework for designing heterogeneous and reconfigurable systems," *NASA/ESA Conference on Adaptive Hardware and Systems (AHS)*, 2013

R. CATTANEO, C. Pilato, M. Mastinu, O. Kadlcek, O. Pell, and M. D. Santambrogio., "Runtime adaptation on dataflow hpc platforms," *NASA/ESA Conference on Adaptive Hardware and Systems (AHS)*, 2013

F. Sironi, M. Maggio, R. CATTANEO, G. D. Nero, D. Sciuto, and M. D. Santambrogio, "Thermos: System support for dynamic thermal management of chip multi-processors," *International Conference on Parallel Architectures and Compilation Techniques (PACT)*, 2013

R. CATTANEO, C. Pilato, G. Durelli, M. D. Santambrogio, and D. Sciuto, "Smash: A heuristic methodology for designing partially reconfigurable mpsocs," *IEEE International Symposium on Rapid System Prototyping (RSP)*, 2013

International workshops

R. CATTANEO, R. Bellini, G. Durelli, C. Pilato, and M. Santambrogio, "Para-sched: a ... scheduler for reconfigurable architectures," *Reconfigurable Architecture Workshop (RAW)*, 2014

G. Durelli, F. Spada, R. CATTANEO, C. Pilato, D. Pau, and M. D. Santambrogio, "Adaptive raytracing implementation using partial dynamic reconfiguration," *Reconfigurable Architecture Workshop (RAW)*, 2014

G. Durelli, A. A. Nacci, R. CATTANEO, C. Pilato, D. Sciuto, and M. D. Santambrogio, "A flexible interconnection structure for fpga dataflow applications," *IPDPS Workshop on Reconfigurable Architectures (RAW)*, 2013

C. Pilato, R. CATTANEO, G. Durelli, A. A. Nacci, M. D. Santambrogio, and D. Sciuto, "A2b: a framework for the fast prototyping of reconfigurable systems," *Informal Proceedings of WRC 2013, 7th HiPEAC Workshop on Reconfigurable Computing*, 2013

R. CATTANEO, N. Xinyu, C. Pilato, T. Becker, M. D. Santambrogio, and W. Luk, "A framework for effective exploitation of partial reconfiguration in dataflow computing," *8th International Workshop on Reconfigurable Communication-centric Systems-on-Chip (ReCoSoC)*, 2013

D. B. Bartolini, F. Sironi, M. Maggio, R. CATTANEO, D. Sciuto, and M. D. Santambrogio, "A framework for thermal and performance management," *Workshop on Managing Systems Automatically and Dynamically (MAD)*, 2012

D. B. Bartolini, M. Carminati, R. CATTANEO, J. Panerati, F. Sironi, and D. Sciuto, "Acos: an autonomic management layer enhancing commodity operating systems," *DAC Workshop on Computing in Heterogeneous, Autonomous, 'N' Goal-oriented Environments (CHANGE)*, 2012

M. D. Santambrogio, F. Cancare, R. CATTANEO, S. Bhandari, and D. Sciuto, "An enhanced relocation manager to speedup core allocation in fpga-based reconfigurable systems," *Reconfigurable Architectures Workshop (RAW)*, 2012

Additional information

Personal interests

Music, hiking, go karting (an adrenalinic and competitive hobby), travelling, reading (mostly self-improvement, economics, politics and world news), satire, continuous learning.

Driving licence(s)

B (cars)

Website

http://www.riccardocattaneo.eu

Company Website

http://www.bottega52.it, http://www.skrlla.com, http://www.sofiasmartliving.com

Languages

Mother tongue(s)

Italian

Other language(s)

Self-assessment European level[*]	Understanding		Speaking		Writing
	Listening	Reading	Spoken interaction	Spoken production	
English	C2 Proficient user	C2 Proficient user	C2 Proficient user	C2 Proficient user	C2 Proficient user

[*] *Common European Framework of Reference (CEF) level*

Self-assessment European level[*]	Understanding		Speaking		Writing
	Listening	Reading	Spoken interaction	Spoken production	
	C2 Proficient user	C2 Proficient user	C2 Proficient user	C2 Proficient user	C2 Proficient user

[*] *Common European Framework of Reference (CEF) level*

I authorise the use of my personal data in compliance with Legislative Decree 196/03.
For more information go to https://www.linkedin.com/in/cattaneoriccardo