

# **CURRICULUM VITÆ**

## **DATI ANAGRAFICI**

**Luca Ciccarelli**

## **ISTRUZIONE**

- Laurea (pre riforma) in Ingegneria Elettronica (orientamento comunicazioni elettriche) conseguita il 17/07/2002 presso la Facoltà di Ingegneria della Università degli Studi di Bologna. Voto di Laurea: 92 (su 100).
- Abilitazione professionale: Dicembre 2002.
- Diploma di Maturità scientifica conseguito presso il liceo scientifico "Albert Einstein" di Rimini.

## **ESPERIENZE PROFESSIONALI**

- Dal 01/01/2018 ad oggi: libero professionista specializzato nella progettazione di impianti fotovoltaici e di sistemi tecnologici per efficientamento energetico civili e industriali ad elevata innovazione, in particolare energie rinnovabili.
- Dal 01/01/2009 al 31/12/2017: responsabile tecnico del Gruppo Ubisol
- Dal 01/1/2006 al 31/12/2008: funzionario e team leader di un gruppo di quattro ricercatori presso STMicroelectronics SpA con contratto a tempo indeterminato.
- Dal 01/09/2006 al 31/12/2005: Collaborazione allo sviluppo di un progetto di calcolo riconfigurabile presso il laboratorio di ricerca congiunto ARCES (Università di Bologna) STMicroelectronics SpA
- Insegnamento (dal 2002 ad oggi):
  - dal 2016 ad oggi: corso di elettronica presso En.A.I.P. Centro S. Zavatta di Rimini
  - Comunità di San Patrignano (Rimini): corsi di impiantistica elettrica e termoidraulica.

## **CONOSCENZA LINGUE**

- Inglese: buona conoscenza scritta e parlata

## **COMPETENZE ACQUISITE**

- Progettazione e gestione di impianti fotovoltaici
- Progettazione elettrica civile e industriale
- Progettazione termoidraulica civile

## **ULTERIORI INFORMAZIONI**

- Esperienza di oltre 10 anni nell'ambito della progettazione di impianti fotovoltaici di differenti tipologie e tecnologie, connessi in BT e MT.
- Autore di oltre 20 brevetti industriali internazionali nell'ambito della microelettronica. (US Patent, EU Patent);
- Partecipazione a numerose conferenze internazionali in qualità di relatore. (IEEE-CICC 2004 e 2006, IEEE-ESSCIRC 2005);
- Autore di pubblicazioni scientifiche su riviste internazionali del settore della microelettronica (IEEE).
- Componente del gruppo UbiSol vincitore del concorso "Nuove Idee Nuove Imprese 2005", in qualità di capogruppo, nel quale ho sviluppato la parte tecnica del business plan

## **INTERESSI**

- Viaggi, in particolare in estremo oriente (Thailandia, Indonesia, Myanmar, Giappone);
- Sport: Triathlon (media e lunga distanza)

## **AUTORIZZAZIONE AL TRATTAMENTO DEI DATI PERSONALI**

Autorizzo il trattamento dei miei dati personali ai sensi del D. Lgs. 30 giugno 2003 n. 196 e del GDPR (Regolamento UE 2016/679).

23/01/2023

Firma

**Luca Ciccarelli**

## REFERENZE IMPIANTI FOTOVOLTAICI

- GROS (Blocco 92A), Rimini 92 Kwp
- GROS (Blocco 12F), Rimini 99 Kwp
- Casa Vinicola Battistini, Rimini 99 Kwp
- Lago Riviera, Rimini 440 Kwp
- Polo Fieristico, Lucca 3000 Kwp (revamping)
- Oleggio 1000 Kwp (revamping)
- Palacongressi, Rimini 323 Kwp

*Note: dal 2008 al 2017 progettati, oltre alle referenze sopra indicate, più di 1000 impianti civili e 50 industriali in BT*

## BREVETTI

*issued date:* 11/11/2004

*patent no.:* US 20040225980

*company:* STMicroelectronics

*title:* Architecture for a connection block in reconfigurable gate arrays

*inventors:* Andrea Cappelli, **Luca Ciccarelli**, Andrea Lodi, Mario Toma, Fabio Campi

*issued date:* 18/05/2006

*patent no.:* US 20060103420

*company:* STMicroelectronics

*title:* Switch block and corresponding switch matrix, in particular for FPGA architectures.

*inventors:* **Luca Ciccarelli**, Carlo Chiesa, Andrea Lodi, Roberto Giansante, Mario Toma, Fabio Campi

*issued date:* 20/03/2007

*patent no.:* US 7193437

*company:* STMicroelectronics

*title:* Architecture for a connection block in reconfigurable gate arrays

*inventors:* Andrea Cappelli, **Luca Ciccarelli**, Andrea Lodi, Mario Toma, Fabio Campi

*issued date:* 19/04/2007

*patent no.:* US 20070085563

*company:* STMicroelectronics

*title:* Switch block for fpga architectures

*inventors:* **Luca Ciccarelli**, Andrea Lodi, Roberto Giansante, Luca Magagni, Roberto Canegallo, Roberto Guerrieri

*issued date:* 26/04/2007

*patent no.:* US 20070092011

*company:* STMicroelectronics

*title:* Chip-to-chip communication system and method.

*inventors:* **Luca Ciccarelli**, Luca Magagni, Alberto Fazzi, Roberto Canegallo, Roberto Guerrieri

*issued date:* 06/12/2007

*patent no.:* US 20070279088

*company:* STMicroelectronics

*title:* T-switch buffer, in particular for FPGA architectures.

*inventors:* **Luca Ciccarelli**, Andrea Lodi, Roberto Giansante, Luca Magagni, Roberto Canegallo, Roberto Guerrieri

*issued date:* 02/07/2008

*patent no.:* EP1940028

*company:* STMicroelectronics

*title:* Asynchronous interconnection system for 3d inter-chip communication.

*inventors:* Luca Magagni, **Luca Ciccarelli**, Alberto Fazzi, Roberto Canegallo, [Roberto Guerrieri](#)

*issued date:* 18/09/2008

*patent no.:* US 20080225987

*company:* STMicroelectronics

*title:* Asynchronous interconnection system for 3D interchip communication

*inventors:* Alberto Fazzi, **Luca Ciccarelli**, Luca Magagni, Roberto Canegallo, Roberto Guerrieri

*issued date:* 09/12/2008

*patent no.:* US 7463055

*company:* STMicroelectronics

*title:* Switch block and corresponding switch matrix, in particular for FPGA architectures.

*inventors:* **Luca Ciccarelli**, Carlo Chiesa, Andrea Lodi, Roberto Giansante, Mario Toma, Fabio Campi

*issued date:* 09/12/2008

*patent no.:* US 7463067

*company:* STMicroelectronics

*title:* Switch block for FPGA architectures

*inventors:* **Luca Ciccarelli**, Andrea Lodi, Roberto Giansante, Luca Magagni, Roberto Canegallo, Roberto Guerrieri

*issued date:* 02/07/2009

*patent no.:* 20090168938

*company:* STMicroelectronics

*title:* Communication system for connecting synchronous devices that are uncorrelated in time.

*inventors:* **Luca Ciccarelli**, Luca Magagni, Alberto Fazzi, Roberto Canegallo, Roberto Guerrieri

*issued date:* 02/07/2009

*patent no.:* US 20090168860

*company:* STMicroelectronics

*title:* Communication system between a first and a second synchronous device that are uncorrelated in time.

*inventors:* Luca Magagni, **Luca Ciccarelli**, Alberto Fazzi, Roberto Canegallo, Roberto Guerrieri

*issued date:* 23/03/2010

*patent no.:* US 7683674

*company:* STMicroelectronics

*title:* T-switch buffer, in particular for FPGA architectures.

*inventors:* **Luca Ciccarelli**, Andrea Lodi

*issued date:* 01/07/2010  
*patent no.:* US 20100169857  
*company:* STMicroelectronics  
*title:* Method for designing a high performance asic (application-specific integrated circuit) accelerator  
*inventors:* Fabio Campi, Claudio Mucci, Stefano Pucillo, **Luca Ciccarelli**, [Valentina Nardone](#)

*issued date:* 01/07/2010  
*patent no.:* US 20100164547  
*company:* STMicroelectronics  
*title:* Base cell for engineering change order (eco)  
*inventors:* **Luca Ciccarelli**, Lorenzo Cali, Massimiliano Innocenti, Claudio Mucci, Valentina Nardone, Matteo Pizzotti, Pankaj Rohilla

*issued date:* 10/08/2010  
*patent no.:* US 7772888  
*company:* STMicroelectronics  
*title:* Communication system for connecting synchronous devices that are uncorrelated in time.  
*inventors:* **Luca Ciccarelli**, Luca Magagni, Alberto Fazzi, Roberto Canegallo, Roberto Guerrieri

*issued date:* 12/08/2010  
*patent no.:* US 20100201400  
*company:* STMicroelectronics  
*title:* Method for implementing functional changes into a design layout of an integrated device, in particular a system-on-chip, by means of mask programmable filling cells.  
*inventors:* Valentina Nardone, Stefania Stucchi, **Luca Ciccarelli**, Lorenzo Cali

*issued date:* 05/10/2010  
*patent no.:* US 7808276  
*company:* STMicroelectronics  
*title:* Chip-to-chip communication system and method  
*inventors:* **Luca Ciccarelli**, Luca Magagni, Alberto Fazzi, Roberto Canegallo, Roberto Guerrieri

*issued date:* 21/06/2011  
*patent no.:* US 7965107  
*company:* STMicroelectronics  
*title:* Base cell for engineering change order (ECO) implementation.  
*inventors:* **Luca Ciccarelli**, Lorenzo Cali, Massimiliano Innocenti, Claudio Mucci, Valentina Nardone, Matteo Pizzotti, Pankaj Rohilla

*issued date:* 05/06/2012  
*patent no.:* US 20120001655  
*company:* STMicroelectronics  
*title:* Base cell for implementing an engineering change order (eco)  
*inventors:* **Luca Ciccarelli**, Claudio Mucci, Massimiliano Innocenti, Valentina Nardone

*issued date:* 03/07/2012  
*patent no.:* US 8214774

*company:* STMicroelectronics

*title:* Method for implementing functional changes into a design layout of an integrated device, in particular a system-on-chip, by means of mask programmable filling cells.

*inventors:* Valentina Nardone, Stefania Stucchi, **Luca Ciccarelli**, Lorenzo Calí

*issued date:* 03/07/2012

*patent no.:* US 8214774

*company:* STMicroelectronics

*title:* Method for implementing functional changes into a design layout of an integrated device, in particular a system-on-chip, by means of mask programmable filling cells.

*inventors:* Valentina Nardone, Stefania Stucchi, **Luca Ciccarelli**, Lorenzo Calí

*issued date:* 07/08/2012

*patent no.:* US 8238502

*company:* STMicroelectronics

*title:* Communication system between a first and a second synchronous device that are uncorrelated in time.

*inventors:* Luca Magagni, **Luca Ciccarelli**, Alberto Fazzi, Roberto Canegallo, Roberto Guerrieri

*issued date:* 07/08/2012

*patent no.:* US 8238502

*company:* STMicroelectronics

*title:* Communication system between a first and a second synchronous device that are uncorrelated in time.

*inventors:* **Luca Ciccarelli**, Andrea Lodi

## **PUBBLICAZIONI**

### **Conferenze**

*title:* Decoder-Based Multi-Context Interconnect Architecture

*authors:* Andrea Lodi, **Luca Ciccarelli**, Andrea Cappelli, Fabio Campi, Mario Toma,

*publication date:* pp. 231-233, 2003

*conference:* Annual Symposium on VLSI

*title:* Routing architecture for multi-context FPGAs

*authors:* Andrea Lodi, Roberto Giansante, Carlo Chiesa, **Luca Ciccarelli**, Mario Toma, Fabio Campi

*publication date:* pp. 246-246, 2004

*conference:* Symposium on Field Programmable Gate Arrays - FPGA

*title:* Low leakage circuit design for FPGAs

*authors:* **Luca Ciccarelli**, Andrea Lodi, Roberto Canegallo

*publication date:* 2004

*conference:* Custom Integrated Circuit Conference - CICC

*title:* Compact Buffered Routing Architecture

*authors:* Andrea Lodi, Roberto Giansante, Carlo Chiesa, **Luca Ciccarelli**, Mario Toma

*publication date:* pp. 179-188, 2004

*conference:* Field-Programmable Logic and Applications - FPL

*title:* An Embedded Reconfigurable Datapath for SoC

*authors:* Andrea Lodi, **Luca Ciccarelli**, Claudio Mucci, Roberto Giansante, Andrea Cappelli, Mario Toma  
*publication date:* pp. 303-304, 2005  
*conference:* Field-Programmable Custom Computing Machines - FCCM

*title:* Combining low-leakage techniques for FPGA routing design  
*authors:* Andrea Lodi, Luca Ciccarelli, Roberto Giansante  
*publication date:* pp. 208-214, 2005  
*conference:* Symposium on Field Programmable Gate Arrays - FPGA

*title:* XiSystem: a XiRisc-based SoC with a reconfigurable IO module  
*authors:* Andrea Cappelli, Andrea Lodi, Massimo Bocchi, Claudio Mucci, Massimiliano Innocenti, Claudia De Bartolomeis, **Luca Ciccarelli**, Roberto Giansante, Antonio Deledda, Fabio Campi, Mario Toma, Roberto Guerrieri  
*publication date:* pp. 196-593 Vol. 1, 2005  
*conference:* Solid-State Circuits IEEE International Conference - ISSCC

*title:* Low leakage design of LUT-based FPGAs  
*authors:* A. Lodi, **L. Ciccarelli**, D. Loparco, R. Canegallo, R. Guerrieri  
*publication date:* 2005  
*conference:* Solid-State Circuits European Conference - ESSCIRC

*title:* A Multi-Context Pipelined Array for Embedded Systems  
*authors:* Andrea Lodi, Claudio Mucci, Massimo Bocchi, Andrea Cappelli, Mario De Dominicis, **Luca Ciccarelli**  
*publication date:* pp. 1-8, 2006  
*conference:* Field-Programmable Logic and Applications - FPL

*title:* A Low-Power Routing Architecture Optimized for Deep SubMicron FPGAs  
*authors:* L. Ciccarelli, D. Loparco, M. Innocenti, A. Lodi, C. Mucci, P. Rolandi  
*publication date:* 2006  
*conference:* Custom Integrated Circuits Conference - CICC

*title:* A dynamically adaptive DSP for heterogeneous reconfigurable platforms  
*authors:* Fabio Campi, Antonio Deledda, Matteo Pizzotti, **Luca Ciccarelli**, Pier Luigi Rolandi, Claudio Mucci, Andrea Lodi, Arseni Vitkovski, Luca Vanzolini  
*publication date:* pp. 9-14, 2007  
*conference:* Design, Automation, and Test in Europe - DATE

*title:* 3D Capacitive Interconnections for High Speed Interchip Communication  
*authors:* Roberto Canegallo, Alberto Fazzi, **Luca Ciccarelli**, Luca Magagni, Federico Natali, PierLuigi Rolandi, Erik Jung, Lea Di Cioccio, Roberto Guerrieri  
*publication date:* 2007  
*conference:* Custom Integrated Circuits Conference - CICC

*title:* A dynamically adaptive DSP for heterogeneous reconfigurable platforms  
*authors:* Fabio Campi, Antonio Deledda, Matteo Pizzotti, **Luca Ciccarelli**, P. Rolandi, C. Mucci, A. Lodi, A. Vitkovski, L. Vanzolini  
*publication date:* 2007  
*conference:* Design, Automation, and Test in Europe - DATE

*title:* 3D Capacitive Interconnections with Mono and BiDirectional Capabilities

*authors:* A. Fazzi, R. Canegallo, **L. Ciccarelli**, L. Magagni, F. Natali, E. Jung, P. L. Rolandi, R. Guerrieri  
*publication date:* pp. 356-608, 2007  
*conference:* Solid-State Circuits IEEE International Conference - ISSCC

*title:* 3D Contactless communication for IC design  
*authors:* Roberto Canegallo, **Luca Ciccarelli**, Federico Natali, Alberto Fazzi, Roberto Guerrieri, PierLuigi Rolandi  
*publication date:* 2008  
*conference:* IEEE International Conference on Integrated Circuit Design and Technology - IICDT

*title:* Implementation of Parallel LFSR-based Applications on an Adaptive DSP featuring a Pipelined Configurable Gate Array  
*authors:* Claudio Mucci, Luca Vanzolini, Ilario Mirimin, Daniele Gazzola, Antonio Deledda, Sebastian Goller, Joachim Knaeblein, Axel Schneider, **Luca Ciccarelli**, Fabio Campi  
*publication date:* pp. 1444-1449, 2008  
*conference:* Design, Automation, and Test in Europe - DATE

*title:* Sustainable (re-) configurable solutions for the high volume SoC market  
*authors:* Fabio Campi, **Luca Ciccarelli**, Claudio Mucci  
*publication date:* pp. 1-8, 2008  
*conference:* International Parallel and Distributed Processing Symposium/International Parallel Processing Symposium - IPDPS(IPPS)

*title:* 3D capacitive transmission of analog signals with automatic compensation of the voltage attenuation  
*authors:* Eleonora Franchi, Federico Natali, Andrea Gnudi, Roberto Guerrieri, Massimiliano Innocenti, **Luca Ciccarelli**, Matteo Scandiuozzo, Roberto Canegallo  
*publication date:* pp. 116-119, 2009  
*conference:* Solid-State Circuits European Conference - ESSCIRC

## **Riviste**

*title:* Decoder-based interconnect structure for multi-context FPGAs  
*authors:* Andrea Lodi, **Luca Ciccarelli**, Andrea Cappelli, Fabio Campi, Mario Toma  
*publication date:* vol. 39, no. 4, 2003  
*journal:* Electronic Letters

*title:* XiSystem: A XiRisc-Based SoC With Reconfigurable IO Module  
*authors:* A. Lodi, A. Cappelli, M. Bocchi, C. Mucci, M. Innocenti, C. DeBartolomeis, **L. Ciccarelli**, R. Giansante, A. Deledda, F. Campi, M. Toma, R. Guerrieri  
*publication date:* vol. 41, no. 1, pp. 85-96, 2006  
*journal:* IEEE Journal of Solid-state Circuits - IEEE J SOLID-STATE CIRCUITS

*title:* Low leakage techniques for FPGAs  
*authors:* Andrea Lodi, **Luca Ciccarelli**, Roberto Guerrieri  
*publication date:* vol. 41, no. 7, pp. 1662-1672, 2006  
*journal:* IEEE Journal of Solid-state Circuits - IEEE J SOLID-STATE CIRCUITS

*title:* 3-D Capacitive Interconnections With Mono and BiDirectional Capabilities  
*authors:* Alberto Fazzi, Roberto Canegallo, **Luca Ciccarelli**, Luca Magagni, Federico Natali, Erik Jung, Pierluigi Rolandi, Roberto Guerrieri

*publication date:* vol. 43, no. 1, pp. 275-284, 2008

*journal:* IEEE Journal of Solid-state Circuits - IEEE J SOLID-STATE CIRCUITS

*title:* The Dream Digital Signal Processor

*authors:* Claudio Mucci, Davide Rossi, Fabio Campi, **Luca Ciccarelli**, Matteo Pizzetti, Luca Perugini, Luca Vanzolini, Tommaso Marco, Massimiliano Innocenti

*publication date:* June 2009

*journal:* Lecture Notes in Electrical Engineering / Springer Publisher