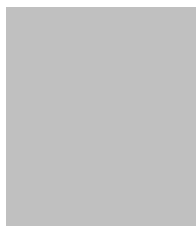


INFORMAZIONI PERSONALI



Andrea Carboni

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Graduated in Computer Science at the University of Pisa (Italy), he is a researcher at the ISTI-CNR Institute of Pisa. Since 2003 he has been done research and development in various fields, initially at CERN (Geneva), where he worked with the excellence in international research.

Initially he worked on network protocols, complex graphical user interfaces, data fusion and HPC cluster management. From 2014, at the ISTI-CNR SILab lab, on digital signals, images and audio / video data streams, algorithms and methods for object detection and feature extraction. All these activities are related to the development of innovative systems aimed at motor rehabilitation, treatment of pervasive developmental disorder and remote data processing. In recent years he has specialized in Active and Healthy Ageing (AHA) related topics and in machine learning based solutions aimed to improve safety and security in public transport.

WORKING POSITION

ISTRUZIONE E FORMAZIONE

Ottobre 2008 **Laurea Specialistica in Tecnologie Informatiche**

Università di Pisa, Pisa (Italia)

Punteggio finale 106/110

Marzo 2004 **Laurea in Informatica**

Università di Pisa, Pisa (Italia)

Punteggio finale 105/110

Giugno 1998 **Maturità scientifica**

Liceo Scientifico F. Buonarroti, Pisa (Italia)

Punteggio finale 52/60

## ESPERIENZA PROFESSIONALE

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- 27/12/2018 **Researcher (permanent) [RP]**  
ISTI-CNR, Pisa (Italia)  
SiLab (Signal and Images Laboratory)
- 08/11/2017 – 07/04/2019 **Researcher (fixed-term) [RFT]**  
ISTI-CNR, Pisa (Italia)  
SiLab (Signal and Images Laboratory)
- 01/12/2014 – 07/11/2017 **Research Fellow [RF4]**  
ISTI-CNR, Pisa (Italia)  
SiLab (Signal and Images Laboratory)
- 05/11/2012 – 04/11/2014 **Research Fellow [RF3]**  
INFN – Istituto Nazionale di Fisica Nucleare, Pisa (Italia)  
INFN Pisa Grid data center
- 24/09/2010 – 23/09/2012 **Research Grant [RG]**  
INFN – Istituto Nazionale di Fisica Nucleare, Pisa (Italia)  
INFN Pisa Grid data center
- 01/07/2009 – 01/02/2010 **Research Fellow [RF2]**  
ISTI-CNR, Pisa (Italia)  
NeMIS (Networked Multimedia Information Systems Laboratory)

- 01/11/2008 – 01/05/2009    **Research Fellow (RF1)**  
ISTI-CNR, Pisa (Italia)  
SiLab (Signal and Images Laboratory)
- 01/03/2006 – 01/07/2007    **Technical Student (selected in an international competition) [TS]**  
CERN, European Organization for Nuclear Research  
Geneva (Switzerland)
- 01/06/2003 – 01/10/2003    **Summer Student (selected in an international competition) [SS]**  
CERN, European Organization for Nuclear Research  
Geneva (Switzerland)

## RESEARCH ACTIVITIES

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The research activity begins during university and sees a growing interest in four main closely related topics: the creation of complex graphical user interfaces (GUI); networks and online/offline data transfer; High Performance Computing (HPC); management and processing of multimedia data flows in the context of assistive technologies. Later on its main research fields will become Active and Healthy Ageing (AHA) related topics and machine learning based solutions aimed to improve safety and security in public transport.

### GUI Development

The development of complex graphical interfaces began in 2003, as a "summer student" at CERN in Geneva [SS]. The work is carried out for the IGUANA graphical framework of the LHC CMS (Compact Muon Solenoid) experiment,

aimed at the three-dimensional visualization of the detector and collisions between particles, mainly using QT on the Linux platform. Subsequently, in the context of a university exam for the creation of a multimedia content aggregator, he participates with his first article at the conference [19]. Back at CERN in 2006 as a "Technical Student", he works for the DQM (Data Quality Monitoring) subsystem of the CMS experiment [TS], part of its activities was related to an increase in functionality of the user interface [4, 8 - 12, 15 - 16]. Immediately after obtaining the Master's Degree, as a research fellow for the SiLab of ISTI-CNR [RF1], he works on the development of PAGE [P6], a real-time interactive system capable of generating sounds and drawings through the recognition of hand movements from analog video camera. In this project he develops a complex graphical interface, created with RealBasic, capable of managing and generating timelines for audio / video streams. In recent years [RF4] [RFT], he provides an important contribution to the creation of graphical interfaces for man/machine interaction applications in the context of the research projects VIRTUOSO [23] [P1], SiDOREMI [6, 20 - 22] [P2], WB@LUCCA [24, 25] [P3], SEMI [26] [P4], INTESA [P7] and ACTIVAGE [P5], a European project in which he is the only reference for the laboratory.

### Networks, data transfer and video streams

The activity at CERN as developer for the DQM subsystem of the CMS experiment [TS] mainly concerned the network infrastructure related to data transfer at TCP/IP level, Unix (Linux) sockets, Myrinet and Gigabit Ethernet networks and the design of the system. The work carried out for the DQM [1 - 4, 7 - 18] was the subject of the specialist degree thesis and was included in important publications on Nuclear Physics [8 - 9]. The work on data streams continued within the SiDOREMI [RF4] [P2] project as responsible for the development of the tele-visit subsystem between patients and healthcare professionals, then refined within the European project ACTIVAGE [RF4] [RFT] [P5].

### HPC computing

The activity took place during the four years spent at the INFN-Pisa Scientific Computing Center [5], born in the early 2000s as a second level Grid Computing Center (Tier2) of the CMS experiment at LHC (CERN – Geneva). The activity carried out [RG – RF3] [7 - 9] supported a consolidation and development phase that saw the center evolve in a multidisciplinary way, integrating very different communities and activities into the Tier2 structure: theoretical physics, aerospace engineering with CFD challenges, interactive analysis of data produced by the LHC. With the introduction within the center of new computing technologies, such as systems with high amounts of RAM, GPGPU or Intel Phi style computing coprocessors, one of the main activities was the administration of the systems and the collaboration with the experimental groups for the optimization of their codes, both in a traditional parallel environment through MPI libraries (OpenMPI) and in the growing Nvidia GPU world. The INFN Theoretical Physics community in Pisa was among the first developers of software libraries for Cuda systems. The activity saw the study and implementation of high-efficiency solutions regarding problems concerning network architecture, hardware, software, and data management for high-performance computer systems as well as the acquisition of a good knowledge of the GPFS filesystem, one of the most used in the HPC environment. The activity saw the management of a GPFS file system of over 2 PB and the administration of over 2000 cores distributed between GPU and HPC clusters.

### Processing and analysis of data flows

Data streams analysis begins in 2003 at CERN, as a developer of a plugin for the visualization of section cuts of 3D graphic elements within the IGUANA graphic framework [SS]. Subsequently, together with other students, he works on an aggregator of multimedia data that can be cataloged through customizable filters [19]. In the years 2008/2009, at the SILab he is responsible for the management and processing of video streams and the drawing routines of the PAGe [P6] project, an interactive system capable of generating sounds and drawings through the recognition of hands and their movement from analog video camera

[RF1]. The system is still used by the painter Marco Cardini for performances of "cybernetic painting" of national artistic importance. In the same period, at the NeMis laboratory [RF2] he deals with the study and implementation of algorithms, techniques and methods for the management, access, and modeling of data in support of digital library systems. From the end of 2014 he returns to SILab where, in the context of assistive technologies, he starts working on signal and image processing, with the design and implementation of real-time algorithms for processing audio, video and generation/display of metadata associated with them.

Examples of these activities are:

- the processing of three-dimensional images, with the extraction and analysis of specific characteristics and the development of a low-cost system for postural analysis using a stabilometric platform [P1],
- the development of a real-time audio-visual system, responsive to gestures, aimed at the treatment of autism spectrum disorders through the interpretation of video images from cameras equipped with infrared and depth sensors and the generation of audio-visual feedback in real time [P2],
- the creation of a computer system that allows to control and evaluate the execution of physical activity in a home environment, through the processing of video images from cameras equipped with infrared and depth sensors [P3, P7],
- the creation of a non-invasive multimedia environment, responsive to the gestures of children affected by autistic spectrum syndrome, based on sound and visual emissions and configured as a space for pedagogical and therapeutic action for the recovery of the right relationship with reality for the subjects involved [P4].

## Artificial vision and Machine Learning

In the field of artificial vision, he works as technical manager in the WeAreClouds@Lucca project [P9], oriented towards research and development activities in the field of monitoring public places, such as squares and streets, through cameras and microphones, using artificial intelligence technologies in order to collect useful information both for the tourism and their impact on the city, both for the purpose of automatic identification of particular events of interest for statistical purposes or for safety. Then he works as CNR project manager for the Smart Passenger Center (SPaCe) project [P10]. The SPaCe project to create a prototype of a multimodal supervision and mobility orchestration solution, which uses artificial intelligence to provide transport operators and authorities with advanced passenger flow management tools, with particular regard to aspects related to safety of passengers and means of transport.

In 2020 he has been selected as a member of CITS DITECFER, regarding activities such as: selection of regional and European initiatives; evaluation of innovation projects; identification of roadmaps; networking with other European and international realities in the railway sector; participation in Shift2Rail events and weekly communications between the various members. The relevant skills for this role are related to security, privacy, data management and big data, computer vision.

### AHA/AAL experience

With the participation in the H2020 ACTIVAGE project, he grows in the context of research on AHA/AAL topics. In 2020 he becomes Technical Scientific Manager for the European project "PlatformUptake.eu - Assessing the State of the Art and Supporting an Evidence-Based Uptake and Evolution of Open Service Platforms in the Active and Healthy Aging Domain" [P11]. The work carried out, is unprecedented in the sector and starts from the idea of finding common and divisive elements of all the European AHA/AAL projects of the previous 15 years, creating a state of the art that at the same time defines domains of interest and a terminology which then became the foundations of the project. It is also particularly significant as it introduces, in the context of the general theme of

AHA/AAL-oriented platforms, a process of subdividing the analysis into three domains: technical, contextual, and business, correlating them with new categories of stakeholders.

Since March 2020 he is technical-scientific evaluator for the Ministry of Economic Development (MISE): his work involve three assignments on three different projects, making key use of Information and Communication Technologies and related to artificial intelligence, augmented reality, integrated services oriented to AHA/AAL and transport.

## Projects

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**Virtuoso (P1)** Un osservatore sanitario per la prevenzione di malattie cardio-metaboliche nella pratica di attività fitness & wellness nei centri turistici  
Duration: 36 months starting from 21/01/2015

Project aimed at providing a set of technological tools, to assist the operators of wellness centres.

Role: development of the system prototype, as responsible for the design and integration within it of the stabilometric analysis system. The SW subsystem relating to the device has been implemented in C++ language in the Microsoft .Net environment. He collaborated in the creation of a prototype for the morphological analysis and extraction of features from three-dimensional scans of the human body. The algorithmic part was implemented in MatLab while Microsoft Kinect Fusion was used for the scans. [23]



**SIDOREMI (P2)** Sistema Domiciliare di Rieducazione Espressiva del Movimento e dell'Interazione

Duration: 24 months starting from 01/12/2013

Project concerning the development of a real-time audio-visual system, responsive to gestures, aimed at the treatment of autism spectrum disorders.

Role: responsible for the development of the teleconferencing subsystem with the operator, implemented using the C# language in the Microsoft .Net environment. He also collaborated in the analysis of video images from cameras equipped with infrared and depth sensors for the generation of audiovisual feedback in real time, using C# and Kinect SDK V2 on the Microsoft platform .Net. [20, 21, 22]

**WB@LUCCA (P3)** Well-Being@Lucca

Duration: 24 months starting from 02/07/2014

Project concerning the development of a system of integrated tools aimed at maintaining the level of psycho-physical well-being in elderly subjects.

Role: creation of the interaction routines and their integration within the graphical interface of the system, using the C# language and Kinect SDK V2 in the Microsoft .Net environment. He also collaborated in the home installation phase of the prototypes used in the experimentation phase. [24, 25].

**SEMI (P4)** Sistema Espressivo Multicanale Interattivo

Duration: 9 months starting from 15/04/2016

Project with the aim of creating a non-invasive multimedia environment, reactive to the gestures of the autistic child with sound and visual emissions, conceived as a space for pedagogical and therapeutic action

for the recovery of the right relationship with the reality that surrounds him.

Role: development of the interactive gesture control multimedia system used in the project, taking care of the development project of the 3D avatar rendering module. He collaborated in the experimentation phase, assisting the operators during the various sessions with the selected subjects. The image processing and visualization part was developed in C#, Processing and Kinect SDK V2 on the Microsoft .Net platform. [26].

**ACTIVAGE (P5)** ACTivating InnoVative IoT smart living environments for AGEing well  
Duration: 48 months starting from 01/01/2017

European project aimed at the development and implementation on a large scale of IoT solutions and services to support active and healthy ageing.

Role: as part of Work Package 9 (task 9.1, 9.2, 9.3, 9.4, 9.7), as technical manager for CNR, he is responsible for the development of a proprietary videoconferencing system (audio/video streaming) to manage remote communication (televisit) between patients and healthcare professionals. As part of Work Package 3 (tasks 3.1, 3.3, 3.5) he collaborates in the identification and description of a common framework aimed at the interoperability of applications and services between the various deployment sites.

**PAGe MMM (P6)** PAGe MMM – Un sistema per la creazione di eventi multimediali a controllo gestuale  
Duration: 6 months starting from 01/11/2008

The project that saw the development of an interactive system capable of generating sounds and drawings through the recognition of hand movement from an analog video camera.

Role: responsible for the creation of a complex graphical interface for the parallel management in real time of all system events (graphic and audio routines), using RealBasic / C++. He collaborates in the creation of the graphic routines for image rendering, of the related filters and in the real-time video streaming acquisition and processing routines from an analog video camera, using C++ / Quartz composer. [AR1]

**INTESA (P7)** INTESA – Servizi Ict iNTegrati per il bEnessere di Soggetti frAgili  
Duration: 24 months starting from 08/09/2016

Project concerning the creation of a set of personalized services based on the use of innovative and non-invasive ICT technologies aimed at improving the quality of life in fragile subjects, integrating the results to be able to determine and prevent the worsening of health conditions.

Role: collaborates in the creation of the software system (algorithms and graphical interface) for the interpretation of video images from cameras equipped with infrared and depth sensors and the generation of audiovisual feedback in real time, using C# and Kinect SDK V2 on the Microsoft platform .Net. [AR4]

**PlatformUptake (P8)** PlatformUptake – Assessing the State of the Art and Supporting an Evidence-Based Uptake and Evolution of Open Service Platforms in the Active and Healthy Ageing Domain.  
Duration: 24 months starting from 01/01/2020

The H2020 PlatformUptake.eu project had as its primary objective to provide a state of the art and analyze Open Service Platforms in AHA/AAL domains. To measure the impact of a platform and improve its adoption, a methodology was devised to monitor its development, adoption, and development dissemination in the European context, listing the key factors determining success or obstacles in their adoption, but also the evolution of their ecosystems and stakeholder networks. There were created tools

oriented to developers and platform providers, offering both the possibility to choose the existing solutions that are more suitable for implementation needs, as well as tools capable of evaluating the quality of a novel AHA/AAL platform. The innovative solutions proposed, the definition of one standard terminology, evaluation of the performance of a platform and a state of the art thorough, are today a reference in the sector.

Ruolo: scientific manager, leader WP2.

#### WeAreClouds@Lucca (P9) We Are Clouds @ Lucca

Finanziato da Fondazione CaRi Lucca

Duration: 24 months starting from 15/11/2019

WeAreClouds @ Lucca carries out research and development activities in the field of monitoring public places, such as squares and streets, through cameras and microphones and using artificial intelligence technologies, to collect useful information both for the evaluation of tourist flows and their impact on the city and for the purpose of automatic identification of particular events of interest for statistical or security purposes.

Role: technical manager, leader of WP1 and WP4.

#### Space (P10) SPaCe – Smart Passenger Center

Duration: 24 months starting from 01/09/2020

The SPACe project saw the creation of the prototype of a multimodal orchestration solution supervision and mobility, which uses artificial intelligence to provide operators and authorities with transport advanced passenger flow management tools, about aspects related to safety of passengers and transports. The collaboration with MERMEC, leader in the sector of transport, has laid the foundations for a fruitful collaboration that is continuing even after the end of the project.

Ruolo: scientific manager

## COMPETENZE

### PERSONALI

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- Language skills** Mother tongue: Italian
- Speaks French fluently (in addition to the years spent at CERN, he grew up in Switzerland until the age of 6) and he has excellent scientific English
- Communication skills** Competenza consolidata da anni di lavoro in team di progetto nazionali ed internazionali. Ottime capacità relazionali con colleghi di ogni grado.
- Other skills** Ability to organize and manage research activity at any level. Ability to assume roles of responsibility in projects, managing the various technical and organizational issues.
- IT skills**
- Programming languages: C, C#, C++, obj C, Java, RealBasic, XML, HTML
  - Development environment: Visual Studio, Eclipse, xCode, Unity, Processing, Matlab, Unreal Engine
  - Framework/Librerie: openGL, openCL, MeshLab, openCV, openInventor, CUDA, OpenMpi, Qt, wxWidgets, devkitarm, palib, Quartz, .Net, numpy, scikit-learn, tensorflow, etc.
  - HPC: design, configuration and installation of HPC/GPU clusters, SAN, InfiniBand
  - Scripting: Javascript, Php, Unix shell scripts, Phyton
  - Operating systems: Unix/Linux, Mac Os X, Windows, Android,

iOS

- Others: PowerPoint, Word, OpenOffice, Excel, Pages, LaTeX, Keynote

## Publications

### Journals

1. G. Bauer, V. Boyer, J. Branson, A. Brett, E. Cano, A. Carboni et al.  
“CMS DAQ Event Builder Based on Gigabit Ethernet”  
Pubblicato in: IEEE Transactions on Nuclear Science  
Year: 2008, Volume: 55, Issue 1  
Pages: 198 – 202, DOI: 10.1109/TNS.2007.914036  
Sintesi attività : contributo per studio flusso dati su TCP/IP
2. G. Bauer, V. Boyer, J. Branson, A. Brett, E. Cano, A. Carboni et al.  
“Effects of Adaptive Wormhole Routing in Event Builder Networks”  
Pubblicato in: IEEE Transactions on Nuclear Science  
Year: 2008, Volume: 55, Issue 1  
Pages: 182 – 189, DOI: 10.1109/TNS.2008.915925  
Sintesi attività: contributo per analisi latenza flusso dati
3. G. Bauer, V. Boyer, J. Branson, A. Brett, E. Cano, A. Carboni et al.  
“The Terabit/s Super-Fragment Builder and Trigger Throttling System for the Compact Muon Solenoid Experiment at CERN”  
Pubblicato in: IEEE Transactions on Nuclear Science  
Year: 2008, Volume: 55, Issue 1  
Pages: 190 – 197, DOI: 10.1109/TNS.2007.911884  
Sintesi attività: contributo su design architettura rete
4. A. Afaq, W. Badgett, G. Bauer, K. Biery, V. Boyer, J. Branson, A. Brett, E.

Cano, A. Carboni et al.

“The CMS High Level Trigger System”

Publicato in: IEEE Transactions on Nuclear Science

Year: 2008, Volume: 55, Issue 1

Pages: 172 – 175, DOI: 10.1109/TNS.2007.910980

Sintesi attività: contribuito paragrafo “monitoring” su visualizzazione e flusso dati

**5.** S. Arezzini, A. Carboni, G. Caruso, A. Ciampa, S. Coscetti, E. Mazzone, S. Piras.

“INFN-Pisa scientific computation environment (GRID, HPC and Interactive Analysis)

Publicato in: Journal of Physics; Conference Series, Volume 513, Track 6. 2014

**6.** M. Magrini, A. Carboni, O. Salvetti, O. Curzio.

“An interactive multimedia system for treating autism spectrum disorder”

Computer Vision - ECCV 2016 Workshops

2016 – Springer – LNCS 9914

DOI: 10.1007/978-3-319-48881-3\_23 pp.331-342

Pubblicazioni come parte di “CMS Collaboration” ( A. Afaq, W. Badgett, G. Bauer, K. Biery, V. Boyer, J. Branson, A. Brett, E. Cano, A. Carboni et al.):

**7.** “Observation of the rare  $B_s^0 \rightarrow \mu^+ \mu^-$  decay from the combined analysis of CMS and LHCb data”

arXiv:1411.4413; CERN-PH-EP-2014-220; CMS-BPH-13-007; LHCb-PAPER-2014-049, 2015 – 46 p.

Publicato in: Nature 522 (2015) 68-72

**8.** “A New Boson with a Mass of 125 GeV Observed with the CMS Experiment at the Large Hadron Collider”

Publicato in: Science 338 (2012) 1569-1575

**9.** “Observation of a new boson at a mass of 125 GeV with the CMS experiment at the LHC”

CMS-HIG-12-028; CERN-PH-EP-2012-220. Geneva: CERN 2012 – 59 p.

Published in: Phys. Lett. B 716 (2012) 30-61

## Conferenze/Workshop

**10.** R. Arcidiacono, G. Bauer, V. Boyer, J. Branson, A. Brett, E. Cano, A. Carboni et al.

“Flexible custom designs for CMS DAQ”

10<sup>th</sup> Topical Seminar on Innovative Particle and Radiation Detectors, Sienna, Italy, 1 – 5 Oct 2006, CMS-CR-2006-092. Geneva : CERN 2006 – 4 p.

Publicato in: Nucl. Phys. B, Proc. Suppl. 172 (2007) 174-177

**11.** E. Meschi, G. Bauer, V. Boyer, J. Branson, A. Brett, E. Cano, A. Carboni et al.

“High Level Trigger Configuration and Handling of Trigger Tables in the CMS Filter Farm”

International Conference on Computing in High Energy and Nuclear Physics, Victoria, Canada, 2 – 7

CMS-CR-2007-060. Geneva : CERN, 2008 – 10 p.

Publicato in: J. Phys.: Conf. Ser. 119 (2008) 022011

**12.** G. Bauer, V. Boyer, J. Branson, A. Brett, E. Cano, A. Carboni et al.

“The Run Control system of the CMS Experiment”



Published in: J.Phys.: Conf. Ser. 119 (2008) 022010

International Conference on Computing in High Energy and Nuclear Physics, Victoria, Canada, 2 – 7 Sept 2007, pp.0022010

**13.** G. Bauer, V. Boyer, J. Branson, A. Brett, E. Cano, A. Carboni et al.

“Infrastructure and Installation of the Compact Muon Solenoid Data Acquisition at CERN”

CERN-2007-007

Topical Workshop on Electronic for Particle Physics, Prague, Czech Republic, 03 – 07 Sept 2007, pp.93-99

**14.** G. Bauer, V. Boyer, J. Branson, A. Brett, E. Cano, A. Carboni et al.

“The Terabit/s Super-Fragment Builder and Trigger Throttling System for the Compact Muon Solenoid Experiment at CERN”

15<sup>th</sup> IEEE Real Time Conference 2007, Fermilab, Batavia, IL, USA, 29 Apr – 4 May 2007

Vedi [3].

**15.** G. Bauer, V. Boyer, J. Branson, A. Brett, E. Cano, A. Carboni et al.

“The Run Control and Monitoring System of the CMS Experiment”

CMS-CR-2007-062. Geneva : CERN, 2007 – 8 p.

Publicato in: PoS: ACAT (2007), pp. 026

11<sup>th</sup> International Workshop on Advanced Computing and Analysis

Techniques in Physics Research, Amsterdam, The Netherlands, 23 – 27

Apr 2007

**16.** A. Afaq, W. Badgett, G. Bauer, K. Biery, V. Boyer, J. Branson, A. Brett, E. Cano, A. Carboni et al. “The CMS High Level Trigger System”

15<sup>th</sup> IEEE Real Time Conference 2007, Fermilab, Batavia, IL, USA, 29 Apr – 4 May 2007

Vedi [4].

- 17.** G. Bauer, V. Boyer, J. Branson, A. Brett, E. Cano, A. Carboni et al.  
“CMS DAQ Event Builder Based on Gigabit Ethernet”  
15<sup>th</sup> IEEE Real Time Conference 2007, Fermilab, Batavia, IL, USA, 29 Apr  
– 4 May 2007  
Vedi [1].
- 18.** G. Bauer, V. Boyer, J. Branson, A. Brett, E. Cano, A. Carboni et al.  
“Effects of Adaptive Wormhole Routing in Event Builder Networks” /CMS  
Collaboration  
15<sup>th</sup> IEEE Real Time Conference 2007, Fermilab, Batavia, IL, USA, 29 Apr  
– 4 May 2007  
Vedi [2].
- 19.** G. Attardi, A. Carboni, E.D. Dottore, P. Di Marcello.  
“The LOA customizable media aggregator”  
First International Conference on Automated Production of Cross Media  
Content for Multi-Channel Distribution (AXMEDIS’05), Florence, Italy, IEEE  
Computer Society. Nov. 30 Dec. 2  
Year: 2005  
Page: 8 pp., DOI: 10.1109/AXMEDIS.2005.48
- 20.** M. Magrini, A. Carboni, O. Salvetti, O. Curzio.  
“An interactive multimedia system for treating autism spectrum disorder”  
ECCV 2016 Workshops - European Conference on Computer Vision  
(Amsterdam, The Netherlands), 8-10 October 2016.  
Versione estesa del paper pubblicata in [6].
- 21.** M. Magrini, A. Carboni, O. Salvetti, O. Curzio.  
“An Auditory Feedback based system for treating Autism Spectrum  
Disorder”

Proceedings of the 3<sup>rd</sup> 2015 Workshop on ICTs for Improving Patients  
Rehabilitation Research Techniques, REHAB 2015, Lisbon, Portugal, Oct.  
1-2, 2015.

ACM 2015, ISBN 978-1-4503-3898-1

**22.** M. Magrini, A. Carboni, O. Salvetti, O. Curzio, P. Barsocchi.

“Il progetto SiDOREMI”

Tecnologie a sostegno delle persone con disturbi dello spettro autistico

Convegno nazionale. Roma, Feb. 25

CNR ISTI 2016-B3-004

## Technical/Project Report

**23.** A. Villa, A. Carboni, M. Pascali, M. Magrini.

“Automatic human body morphological measurement from 3D scan acquired with low cost devices.” Technical report, 2016.

CNR ISTI 2016-TR-044

**24.** F. Delmastro, G. Santoro, P. Barsocchi, E. Ferro, F. Mavilia, O. Salvetti, M. Magrini, A. Carboni, S. Tsaftaris, M. Venianaki.

“WB@Lucca - Relazione dell'attività svolta nel periodo 03/luglio/2014 - 02/luglio/2015.” Well Being@Lucca. Project report D1, 2015.

CNR ISTI 2016-TR-044

**25.** F. Delmastro, G. Santoro, E. Distefano, A. Crivello, P. Barsocchi, E. Ferro, D. La Rosa, F. Mavilia, O. Salvetti, M. Magrini, A. Carboni, S. Tsaftaris, M. Venianaki.

“WB@Lucca - Relazione dell'attività svolta nel periodo 03 luglio 2015 - 31 ottobre 2016”. Well-being@Lucca. Project report D2, 2016.

CNR ISTI 2016-TR-044

**26.** A. Villa, A. Carboni, M. Righi, M. Magrini, O. Salvetti.

“Semi - Sistema espressivo multicanale interattivo” Project report, 2016.

CNR ISTI 2016-PR-012

**Corsi** Partecipazione a “Corso sul file system parallelo e distribuito GPFS”, presso CNAF Bologna, nel periodo 12-15 Dicembre 2011 per una durata complessiva di 30 ore.

Conseguito attestato di partecipazione, rilasciato da CNAF Bologna in data 15 Dicembre 2011.

Partecipazione a “Introduction to scientific programming using GPGPU and

CUDA”, presso CINECA Bologna , nel periodo 8-9 maggio 2014 per una durata complessiva di 16 ore.

Conseguito attestato di partecipazione, rilasciato da CINECA Bologna in data 9 maggio 2014.

Data e luogo

Firma

Autorizzo il trattamento dei dati personali contenuti nel mio curriculum vitae in base all'art.13 del D.Lgs. 196/2003 e all'art. 13 del Regolamento UE 2016/679 relativo alla protezione delle persone fisiche con riguardo al trattamento dei dati personali.