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PERSONAL INFORMATION

Bartolomeo Montrucchio

WORK EXPERIENCE

From 2015 to now	Associate Professor at Politecnico di Torino Department of Control and Computer Engineering
From 2003 to 2015	Assistant Professor at Politecnico di Torino Department of Control and Computer Engineering

EDUCATION AND TRAINING

From 1999 - 2002	PhD Degree in Computer and Control Engineering Politecnico di Torino
From 1988 - 1998	Laurea Degree in Electronic Engineering Politecnico di Torino

Research and Academic Activity

The scientific activity of Bartolomeo Montrucchio is mainly focused on the following topics:

- computer vision;
- parallel and distributed computing;
- image processing and scientific visualization;
- motion estimation;
- wireless sensor networks, radio-frequency identification systems (RFID) and ubiquitous computing;
- quantum computing.

Bartolomeo Montrucchio has, in agreement with Scopus (Author ID 6603463265, 12 July 2019):

- h-index = 14
- 748 citations (in the last five years citations are 2019(72), 2018(89), 2017(73), 2016(68), 2015(59), 2014(48)); in the last 10 years the number of citations is 663
- 94 indexed documents.

Bartolomeo Montrucchio's WOS Researcher ID is E-7368-2014, while the ORCID ID is 0000-0003-0065-8614.

Bartolomeo Montrucchio is (co)author of several scientific publications categorized as follows (numbers refer to the full list of publications):

- 50 international journals (from 1 to 50 in the full list);
- 7 US or Eu granted patents (from 51 to 57 in the full list); these granted patents have been developed during contracts with Pirelli S.p.A; there are other patents, partially granted as Italian patents or just submitted, not reported here and linked to the research activity;
- 5 book chapters (from 58 to 62);
- 79 international conferences(from 63 to 141); number 76 won the first prize in the Student Paper Competiition;
- 1 italian journal and 2 italian conferences (from 142 to 144);
- 1 didactic book (in Italian), number 145.

The three most important outcomes have been selected in order to give an overview of the global research activity:

(number 14 in the full list) (59 citations [Scopus], Impact Factor 3,59) B. Montrucchio and D. Quaglia, "New Sorting-Based Lossless Motion Estimation Algorithms and a Partial Distortion Elimination Performance Analysis", IEEE Transactions on Circuits and Systems for Video Technology, Vol. 15, No. 2, February 2005, pp. 210-220, ISSN 1051-8215, United States, DOI: 10.1109/TCSVT.2004.841689.
The paper has been selected since for citations (it has not self-citations) and for editorial level it represents an example of original research (two authors only) and of good spreading.
The paper analyzes distortion behavior from the theoretical point of view and introduces new algorithms to improve searching and matching phases in block motion estimation. It also uses the concept of wizard, in order to understand which would be the optimal performance for the algorithms. Bartolomeo Montrucchio, in particular, has contributed to proposing the two fast full search algorithms and to creating the wizard.

(18) (40 citations [Scopus], Impact Factor 1,69) F. Lamberti, B. Montrucchio and A. Sanna, "CMBFHE: A Novel Contrast Enhancement Technique based on Cascade Multistep Binomial Filtering Histogram Equalization", IEEE TRANSACTIONS ON CONSUMER ELECTRONICS. vol. 52-3, 2006, pp. 966-974 ISSN: 0098-3063, DOI: 10.1109/TCE.2006.1706495, United States.
Also this paper has been selected since for citations (it has no self-citations) and spreading it can represent a significant result. Moreover it has received most of its citations in the very last years; this means that it still has the capability of being a reference point.
The paper presents a high performance contrast enhancement algorithm using cascaded multistep binomial filtering. Bartolomeo Montrucchio, in particular, has contributed to propose the new algorithm and the use of binomial filters.

(34) (34 citations [Scopus], Impact Factor 6,76). F. Gandino, B. Montrucchio, M. Rebaudengo, "Key Management for Static Wireless Sensor Networks With Node Adding", 2014, IEEE TRANSACTIONS ON INDUSTRIAL INFORMATICS, vol. 10 n. 2, pp. 1133-1143. - ISSN 1551-3203, DOI:10.1109/TII.2013.2288063, United States.
This paper has been chosen since it represents a good example of the results obtained in the field of wireless sensor network. It has a good number of citations (only 2 self-citations).
It presents an innovative key management scheme called random seed distribution with transitory master key. It also provides a high security level.
Bartolomeo Montrucchio's contribution, in particular, was mainly related to the algorithm design.

The full list of publications is at the end of this document. Reference numbers are the same.

Bartolomeo Montrucchio is currently serving as Associate Editor (starting from 2019) for IEEE Transactions on Vehicular Technology
http://www.it.is.tohoku.ac.jp/~tvt/vtjournal/editors.html.

Bartolomeo Montrucchio is currently a component of the IEEE Italy entrepreneurship committee (chair Prof. Vincenzo Piuri).

Bartolomeo Montrucchio is currently Guest Editor of a special issue of the journal Sensors, with title "Sensor fusion and Visualization in IoT Applications for Environmental Monitoring"
https://www.mdpi.com/journal/sensors/special_issues/sensor_fusion_and_visualization.

Bartolomeo Montrucchio served as Lead Guest Editor for a special issue of the journal Mobile Information Systems, with title "Mobility for the Internet of Things" https://www.hindawi.com/journals/misy/si/820742/; see also number (45) in the full list of the publications.

Bartolomeo Montrucchio has been "Adjunct Professor" with Dept. of Electrical and Computer Engineering of University of Illinois at Chicago (UIC) for the double degree project "TOP-UIC" between Politecnico di Torino and University of Illinois at Chicago; he has been lecturer for a part (20 hours) of the course of Special Topics during the second part of academic year 2007/2008.

He has been supervisor of a joint Master Thesis with Dept. of Electrical and Computer Engineering of University of Illinois at Chicago (UIC) for the double degree project "TOP-UIC" between Politecnico di Torino and University of Illinois for the candidate Vittorio Giovara (May 2009, Zhu-Montrucchio-Khokar)

He won the first prize in "Student paper competition" in "EURASIP BIOSIGNAL 2002" for the paper Lamberti F., Montrucchio B., Demartini C., "A wireless-based architecture for medical teleconsulting", 16th EURASIP Conference, pp. 454-456, 2002 (ISBN 8021421207). June 2002. Number (76) in the full list of publications.

Bartolomeo Montrucchio has participated to the scientific committee of several International Conferences:
- EURASIP RFID 2012 Conference, participant of Organizing committee and Technical Program Committee / Italy

- EURASIP RFID 2015 Conference, participant of Technical Program Committee / Germany

- EURASIP RFID 2018 Conference, participant of Technical Program Committee / Czech Republic

- ENICS 2008 Technical Program Committee/ Spain

- CENICS 2009 Technical Program Committee/ Malta

- CENICS 2010 Technical Program Committee/ Italy

- CENICS 2011 Technical Program Committee/ France

- CENICS 2012 Technical Program Committee/ Italy

- CENICS 2013 Technical Program Committee/ Spain

- CENICS 2014 Technical Program Committee/ Portugal

- CENICS 2015 Technical Program Committee/ Italy

- CENICS 2016 Technical Program Committee/ France

- CENICS 2017 Technical Program Committee/ Italy

- CENICS 2018 Technical Program Committee and Steering Committee/ Italy

- CENICS 2019 Technical Program Committee and Steering Committee/ France

- VISAPP 2014 Program Committee/ Portugal

- VISAPP 2015 Program Committee/ Germany

- VISAPP 2016 Program Committee/ Italy

- VISAPP 2017 Program Committee/ Portugal

- VISAPP 2018 Program Committee/ Portugal

- VISAPP 2019 Program Committee/ Czech Republic

- Didamatica 2011, Politecnico di Torino, Comitato dei Revisori e Segreteria Tecnica

Bartolomeo Montrucchio has been the Exhibits & Demos Chair for the conference INTETAIN 2015

Bartolomeo Montrucchio has managed, from 2006 up to 2012, the annual presentation into the European researchers' night, hold in Turin each year in September (hold by means of european funds); he has presented the activities of the Dipartimento di Automatica e Informatica, by means of exhibitions, hand-crafted items and prototypes.

He is Member of IEEE (from 2002), ACM (from 2015) and Eurographics (from 2002).

Bartolomeo Montrucchio has been reviewer for several journals and conferences. Here is a partial list:
- IEEE Transactions on Computers

- IEEE Transactions on Industrial Informatics

- IEEE Transactions on Parallel and Distributed Systems

- IEEE Transactions on Image Processing

- IEEE Transactions on Circuits and Systems for Video Technology

- IEEE Transactions on Communications

- IET Image Processing

- IET Wireless Sensor Systems

- IET Computers & Digital Techniques

- Computer Graphics Forum

- Pattern Recognition Letters

- Parallel Computing

- Electronics Letters

- IETE Technical Review

- Computer Methods and Programs in Biomedicine

- Physica A

- Journal of Communications and Networks

- Journal of Aeronautics & Aerospace Engineering

- VISAPP

- WSCG

Projects

Bartolomeo Montrucchio is a member of the GRAINS - GRAphics and INtelligent Systems group (formerly Computer Networks and Architectures Group) at the Politecnico di Torino, coordinated and supervised by Prof. Paolo Montuschi and Prof. Claudio Demartini. For the ubiquitous computing research field, other than in GRAINS group, he works also in the Ubiquitous Computing group, coordinated by Prof. Maurizio Rebaudengo.

Starting from the end of 2017, he has also started coordinating a research group called Quantum Computing (QC), in which, in addition to him, there are two PhD Students, Edoardo Giusto and Mohammad Ghazi Vakili, who work on QC activities for 50% of their time. Since the QC activity is quite new (and fascinating) the first papers on it are expected in late 2019; up to now the two PhD students have followed specific on-line PhD courses on QC from Massachusetts Institute of Technology (MIT). QC activity is also concentrated on a research contract with General Motors Global Propulsion Systems (Torino), started in autumn 2018 and on a research contract with TIM (Telecom Italia Mobile) that is going to start in September 2019. Moreover Bartolomeo Montrucchio has proposed to the PhD

program of Computer and Control Engineering in Politecnico di Torino to be the lecturer of a III level course on Quantum Computing; the course is currently being held (April-May 2019).

Bartolomeo Montrucchio has been the academic supervisor for the following PhD students (with whom there are several publications):
*   Erwing Ricardo Sanchez (XXII cycle -completed- thesis entitled "Sistemi Informatici per l'ubiquitous computing");
*   Fiaz-Gul Khan (XXV cycle -completed- thesis entitled "General purpose computation for GPUs using OpenCL/CUDA and Infiniband"); Fiaz Khan is now Assistant Professor at COMSATS University, Abbottabad Campus, Pakistan;
*   Omar Usman Khan (XXV cycle -completed- thesis entitled "High performance computing using GPU"); Omar Khan is now Associate Professor and Head of the CS department at FAST-NUCES Peshawar, Pakistan;
*   Bilal Jan (XXVII cycle -completed- thesis entitled "Parallel and distributed programming for data/computation intensive applications");
*   Masoud Hemmatpout (XXXI cycle);
*   Sorath Asnani (XXXIV cycle).

He has been the supervisor for 5 Research Assistants (Assegno di Ricerca); one of them of senior level (Post-doc).

Fundamental and industrial (applied) research has been done also with reference to several research projects, european and national, as depicted in the following.

Bartolomeo Montrucchio has participated as component of research unit, to many (also european) projects (within the GRAINS research group): OPLON (OPportunities for active and healthy LONgevity), "IDEM (Internet Data Environment Monitoring)", "NAMATECH: Nano -materials and -technologies for intelligent monitoring of safety, quality and traceability in confectionery products", "SAFE FOOD CONTROL: Sviluppo di Sistemi e Tecnologie Innovative per la produzione, conservazione, trasformazione e valorizzazione dell'ortofrutticola piemontese di qualità", "Piattaforma Tecnologica Innovativa per l'Internet of Things", "Centro di competenza sui Wireless Microsensor Systems", "Wireless sensors network for energy management in educational buildings (WiFi4Energy)", "Tecniche di Tracciabilità alimentare per la qualità basate su tecnologia RFID", "HELEN tHe European LEarning Network", "IVShopping: interfaccia per un negozio virtuale interattivo", "Strumenti e tecniche per la realizzazione di negozi virtuali distribuiti", "Elaborazione ad alte prestazioni per applicazioni con requisiti di elevata intensita' computazionale e vincoli di tempo reale", "Studio e sviluppo di un sistema per il controllo e il monitoraggio in tempo reale del territorio per la prevenzione degli incendi", "High quality secure and seamless document communication system" (HIPSCAN IST 2000-29370), CERCOM (Centro di Eccellenza per le Radio Comunicazioni Multimediali).

For the scientific responsibility (Principal Investigator) of competitive National and International research projects, awarded through a peer-review process, this is the list:

- Co-responsible (with Prof. Andrea Sanna) of the project "Sviluppo di un sistema di calcolo ad alte prestazioni mediante cluster di Personal Computer", project Giovani Ricercatori (Young Researchers) Bando del Politecnico di Torino (10 millions 744 thousands italian lire).From 01-01-1999 to 31-12-1999
- Principal investigator of the european project (code of Politecnico 02_RE104MB01) "V.I.M. A Virtual environment for experiencing Mathematics", (138950 euro).From 01-10-2004 to 30-09-2005
- Responsible for the local unit "Politecnico di Torino" of the european project (code of Politecnico 02_RE106MB01) "Valorisation of an Experiment-based Training system through a TRansnational Educational Network Development (VET-TREND)", Ref. RO06BFNT175014 (Leonardo da Vinci); coordinating unit was from University of Brasov (Romania) (2006-2008 18 mila 831 euro). From 01-06-2006 to 01-06-2008
- Principal investigator of the project from Fondazione Cassa di Risparmio di Cuneo (code of Politecnico 02_RIP07MB01) "Sistema di tracciabilità alimentare basato su tecnologie ICT a supporto di un marchio collettivo". The project required activating a Research assistant position for two years (started in October 2007). The managed budget is of 37416 euro. From 01-10-2007 to 01-10-2009
- Responsible for two separate units of the regional project (funded from Regione Piemonte) (code of Politecnico 02_RIJ08MB01) "Next MIRS progetto per la produzione integrata di pneumatici per Alte Prestazioni". It is involved also Pirelli S.p.A.. B. Montrucchio managed a total of about 300000 euro, partially with a special project (111000 euro) with Pirelli S.p.A. The project required activating three Research assistant positions for two years. Principal investigators of the project were Ing. Gianni Mancini (Pirelli S.p.A.) and Prof. Riccardo Sisto (Politecnico di Torino).From 01-05-2008 al 01-01-2011.

In particular for the european projects Bartolomeo Montrucchio was:
- principal investigator for VIM project;
- local unit responsible for VETTREND project.

For the scientific responsibility of National and International research projects, ruled through partnership agreements with companies and/or public private bodies, which are leaders in their own sector, this is the list:
- Project (internal code Politecnico 195/2012) with Pirelli Tyre S.p.A. on using of Computer Vision for industrial purposes. Value of the project 30000 euro. Role: principal investigator. From 17-10-2011 to 16-04-2012
- Project (internal code Politecnico 1374/2012) with Pirelli Tyre S.p.A. on using of Computer Vision for industrial purposes. Value of the project 30000 euro. Role: principal investigator. From 17-04-2012 to 16-04-2013
- Project (internal code Politecnico 699/2014) with Pirelli Tyre S.p.A. on using of Computer Vision for industrial purposes. Value of the project 25000 euro. Role: principal investigator. From 01-01-2014 to 01-01-2015
- Project (internal code Politecnico 485/2014) with SPEA S.p.A. on using of Computer Vision for industrial purposes. Value of the project 8000 euro. Role: principal investigator. From 30-06-2014 to 30-09-2014
- Project (internal code Politecnico 871/2015) with Pirelli Tyre S.p.A. on using of Computer Vision for industrial purposes. Value of the project 20000 euro. Role: principal investigator. From 09-10-2015 to 31-12-2015

- Project (internal code Politecnico 437/2016) with Pirelli Tyre S.p.A. on using of Computer Vision for industrial purposes. Value of the project 40000 euro. Role: principal investigator. From 02-03-2016 to 31-12-2016
- Project (internal code Politecnico 166/2017) with Magneti Marelli Sistemi Sospensioni S.p.A. on using of Computer Vision for industrial purposes. Value of the project 40000 euro. Role: principal investigator. From 07-03-2017 up to now
- Project with Pirelli Tyre S.p.A. on using of Computer Vision for industrial purposes. Value of the project 10000 euro. Role: principal investigator. From 01-06-2017 up to now
- Project with General Motors Global Propulsion Systems (Torino), for Quantum computing in cars. Role: principal investigator. From 01-09-2018 up to now (one year 20000 euro)
- Project with TIM (Telecom Italia Mobile), for Quantum Computing. Role: principal investigator. To be signed in September (one year, about 15000 euro).

In 2017 Bartolomeo Montrucchio obtained the annual individual funding for basic research activities (FFBR 2017), provided by the Italian Ministry of Education, University and Research.

For the outcomes obtained in the field of technology transfer, in terms of participation in start-ups and spin-offs, development, use and commercialization of patents/licenses:
- Bartolomeo Montrucchio has worked mainly with Pirelli company, specifically on technology transfer. In fact the patents listed with numbers from 51 to 57 (in the full list of publications) are on the design of specific characteristics of a special purpose machine that is in the design phase in Pirelli S.p.A.
- Other than the patents with Pirelli S.p.A., there are other three submitted patents (not granted yet), coming from inter-department research in Politecnico di Torino:
1. Development of a system called Photochionometer, used for measuring the snow density in critical situations: Method for measuring density of snow for e.g. pure and applied snow research purpose in modern weather station, involves measuring light attenuation between photoemitters and photodetectors to determine density of snow Patent Number: WO2012164493-A1; IT1405938-B; EP2715312-A1 Patent Assignee: POLITECNICO DI TORINO Inventor(s): MONTRUCCHIO B; SUOZZI E; NOCERINO G..
The project related to the instrument was inserted in the best 10 ideas of the Start Cup at the presentation of ideas of Start Cup 2011 done in Politecnico di Torino on 30 June 2011
2. A patent for a machine able to reduce the grow of cancer cells in particular conditions by means of low intensity magnetic fields. This work has been done in collaboration with several other departments of Politecnico di Torino and of Università di Torino (Città della Salute), in particular with Prof. Umberto Lucia (see publication number 36); the patent is now a PCT

A patent, still to be submitted, with other departments and with Università di Torino (Città della Salute) for computer-aided surgery of the femur (main investigator is Prof. Enrico Vezzetti)

Didactic activity _____

Bartolomeo Montrucchio has been involved in several courses of Bachelor (I level), Master of Science (II level), PhD level (III level) and specializing courses (the last in particular with SIS Piemonte (Scuola Interateneo di Specializzazione Piemonte)) since 1999/2000. Didactics has been done mainly in Italian and partly in English, with a number of students up to about 300:

He is currently the lecturer or teaching assistant for the following courses:

• lecturer (titolare) for Informatica (Computer Sciences, I year, about 330 students, 8 credits, 80 hours, in Italian), Computer Vision (Ing. Informatica e del Cinema, I and II year II level, about 50 students, 6 credits, 60 hours, in Italian), System Programming (I year, II level, Communications And Computer Networks Engineering, about 140 students, 6 credits, 60 hours, in English), Parallel and Distributed Computing (III level, from 2008/2009, about 40 students coming from different PhD programs, 5 credits, 25 hours, in English) and Quantum Computing (III level, from 2018/2019, about 20 students coming from different PhD programs, 4 credits, 20 hours, in English)

• teaching assistant (in part) (esercitazioni) for the course of Architettura dei Sistemi di Elaborazione (I year, II level, Prof. Paolo Montuschi, in Italian)

• in the past he has also been a lecturer for Operating System (Sistemi Operativi) (from 2006/2007 for some years), for Standards and Formats (unofficial translation of Gestione dei formati e standard) (from 2007 to 2008), for courses in teledidactics (from 2003/2004), for several specializing courses for the SIS school and for second level Master courses (in Vercelli from 2001/2002); he has also been a teaching assistant (esercitatore) for several courses, in particular Operating Systems and Computer Architectures, starting from 1999/2000; some courses have been done in English (from 2008/2009).

Considering only courses of I, II and III level and specializing postgraduate courses at SIS and at second level Master, this is a summary of all teaching activities:

A.Year	Lecturer	Teaching assistant	Other role	Other courses	
1999/2000			4		4
2000/2001			3		3
2001/2002			4	1	5
2002/2003		3		1	4
2003/2004	2	3	1	2	8
2004/2005	2	3	1	1	7
2005/2006	2	3	2	2	9
2006/2007	3	3	2	1	9
2007/2008	5	3	2	2	12
2008/2009	3	3	2		8
2009/2010	3	2	2		7
2010/2011	2	2	2		6
2011/2012	3	2	1		6
2012/2013	3	2			5
2013/2014	3	2	1		6
2014/2015	3	1	1		5
2015/2016	4	1			5
2016/2017	4	1			5
2017/2018	4	1			5
2018/2019	5	1			6

51   36   28   10

He has been the supervisor for more than 50 thesis of Master of Science and for several others at the Bachelor level. He participated to three projects of ASP (Alta Scuola Politecnica, founded in 2004 from Politecnico di Milano and Politecnico di Torino) starting from 2007.

Management activity

Bartolomeo Montrucchio is, starting from 2 July 2012, Deputy Director of Centro Interateneo di interesse regionale per la formazione degli Insegnanti Secondari (CIFIS), a consortium of Università di Torino, Politecnico di Torino and Università degli Studi del Piemonte Orientale, whose main purpose is to manage postgraduate specializing courses for future professors in the secondary school.

Before being Deputy Director of CIFIS, he held other positions in the previous SIS (Scuola Interateneo di Specializzazione del Piemonte), starting from 2003. For the SIS specializing school he teached several courses and covered several roles.
For SIS before and CIFIS later Bartolomeo Montrucchio managed several specializing addresses of courses, in particular for the A42 class, Computer Science, but also A033, for which he was the chairman of the committee for a special selection in July 2012 with more than 500 candidates.
One recent duty was (May 2018) to be part of a committee for selecting professors for the future courses linked to CIFIS.

Inside the Department of Control and Computer Engineering (DAUIN) Bartolomeo Montrucchio is a member of Giunta of the DAUIN Department of Politecnico di Torino starting from October 2015. In the past (2007) he was also a member of Commissione Comunicazione Esterna of the III Faculty (now no more existing).

Bartolomeo Montrucchio, from 4 April 2018, is a member of Commissione strategie per le Tecnologie dell'Informazione, whose chair has been at first Prof. Marco Mezzalama and now Prof. Paolo Montuschi. He has also been encharged to coordinate a sub-committee for Smart Working.

He was appointed as a member of several competition selection boards, in order to select technical personnel:
- Politecnico di Torino, Cat. C
- Regione Valle d'Aosta, Cat. D (2010)
- Università della Valle d'Aosta, Cat. C (2010)
- CNR-IEIIT (Torino), Researcher III level (2018)

Bartolomeo Montrucchio was also member of commission in competitive examination for a Researcher at Università di Verona (ING-INF/05) (2008).

For scientific and technology transfer aims he was appointed as Coordinator of Technology transfer: patents and spi-offs committee in the DAUIN Department of Politecnico di Torino.

Bartolomeo Montrucchio has been a tutor of three ASP (Alta Scuola Politecnica, composed by Politecnico di Torino and Politecnico di Milano) projects, from 2007 up to 2015.

He is in charge (from 2012) of Salone dell'Orientamento (for the course on Ingegneria Informatica only). It is an exhibition done for recruiting students from the High School in the first level courses, held in April each year in Politecnico di Torino.

Bartolomeo Montrucchio is enrolled in the REPRISE database, for:
- Fundamental research (ERC area PE6_8)
- Applied research, with keywords computer vision, process control, image processing.

Bartolomeo Montrucchio has been a reviewer for PRIN projects in 2016 (national funds for fundamental research in Italy).

Bartolomeo Montrucchio has been a reviewer (2017) for a project of a company in Provincia Autonoma di Trento (project was on Computer Vision).

Bartolomeo Montrucchio has been a reviewer for Programma per Giovani Ricercatori "Rita Levi Montalcini".

Bartolomeo Montrucchio, since 2010, has been a consultant for Regione Valle d'Aosta to verify fundings given to companies following Legge Regionale (Valle d'Aosta) 7 December 1993, n.84:
- 7 projects reviewed up to now (up to several hundreds of thousands euro of fundings for each of them).

He worked as external technical expert for INVALSI tests for ITS (2013).

Bartolomeo Montrucchio was the chair of a committee encharged of managing "C.I.G. 7168360DCB - Convocazione sedute pubbliche per realizzazione piattaforma web per l'incontro della domanda e dell'offerta di lavoro di soggetti diplomati in percorsi ITS (gara pubblica di acquisto)" in Fondazione ITS per l'ICT Piemonte (November 2017).

Member of Collegio Docenti of the PhD program of Computer and Control Engineering for the two-years periods:
- 2014-2016
- 2018-2020

Member of the committee for PhD selection of the program of Computer and Control Engineering in:
- 2015 (XXXI cylcle of PhD)
- 2016 (XXXII cycle of PhD

<u>List of all Bartolomeo Montrucchio's publications (also with reference to the last 10 years)</u>

International Journals and Magazines
1. A. Sanna, P. Montuschi and B. Montrucchio, "Parallel Algorithm for Image Rendering and its Implementation", IEE Electronics Letters, Vol. 32, No. 14, July 1996, pp. 1275-1277, ISSN 0013-5194, Stevenage SG1 2SD (United Kingdom).
2. A. Sanna, P. Montuschi, A. Fisone and B. Montrucchio, "A New Algorithm for The Rendering of CSG Scenes," Computer Journal, Vol. 40, No. 9, pp. 555-564, 1997, ISSN 0010-4620, Oxford (United Kingdom).

3. B. Montrucchio, A. Sparavigna, and A. Strigazzi, "A new image processing method for enhancing the detection sensitivity of smooth transitions in liquid crystals", Liquid Crystals, Vol. 24, No. 6, pp. 841-852, 1998, ISSN 0267-8292, Taylor & Francis, Abingdon Oxfordshire (United Kingdom).

4. B. Montrucchio, A. Sparavigna, S. I. Torgova, and A. Strigazzi, "A novel order transition inside the nematic phase of trans-4-hexylcyclohexane-1-carboxylic acid discovered by image processing", Liquid Crystals, Vol. 25, No. 5, pp. 613-620, 1998, ISSN 0267-8292, Taylor & Francis, Abingdon Oxfordshire (United Kingdom).

5. A. Sanna, B. Montrucchio and A. Sparavigna, "A Parallel Algorithm of Texture Analysis for Liquid Crystal Investigation", Pattern Recognition Letters, Vol. 20, No. 2, pp. 183-190, 1999, ISSN 0167-8655, Elsevier, The Netherlands.

6. A. Sparavigna, A. Sanna, B. Montrucchio and A. Strigazzi, "Streamline Image Analysis: a New Tool for In- vestigating Defects in Nematic Liquid Crystals", Liquid Crystals, Vol. 26, No. 10, pp. 1467-1478, 1999, ISSN 0267-8292, Taylor & Francis, Abingdon Oxfordshire (United Kingdom).

7. B. Montrucchio, P. Montuschi, A. Sanna and A. Sparavigna, "Visualizing Vector Fields: the Thick Oriented Stream-Line Algorithm (TOSL)", Computers & Graphics, Vol. 25, No. 5, pp. 847-855, 2001, ISSN 0097-8493, Elsevier, DOI: 10.1016/S0097-8493(01)00126-1, The Netherlands.

8. A. Sanna, and B. Montrucchio, "3D Technologies and Products for E-Commerce on the Web", Software Focus, Vol. 2, No. 4. pp. 157-163, 2001, ISSN 1529-7942, John Wiley & Sons, Ltd. United States.

9. B. Montrucchio, F. Lamberti, A. Sanna and P. Montuschi, "Measuring isotropic local contrast: a circular mask based approach", Journal of WSCG, Vol. 10, 2002, pp. 83-90, ISSN 1213-6972, Plzen (Czech Republic).

10. F. Lamberti, B. Montrucchio, A. Sanna, and C. Zunino, "A Web-based Architecture Enabling Multichannel Telemedicine Applications", Journal on Systemics, Cybernetics and Informatics, Vol. 1, No. 1. pp. 25-31, 2003, ISSN 1690-4524.

11. F. Lamberti, A. Gamba and B. Montrucchio, "Computer-assisted analysis of in-vitro vasculogenesis and angiogenesis processes", Journal of WSCG, Vol. 12, No. 1, 2004, pp. 237-244, ISSN 1213-6972, Plzen (Czech Republic).

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