

Curriculum Vitae et Studiorum

Sebastiano Battiato

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Status: Married (since 1999). He has 2 daughters.

Short Biography: Sebastiano Battiato is full professor of Computer Science at University of Catania. He received his degree in computer science (summa cum laude) in 1995 from University of Catania and his Ph.D. in Computer Science and Applied Mathematics from University of Naples in 1999. From 1999 to 2003 he was the leader of the “Imaging” team at STMicroelectronics in Catania. He joined the Department of Mathematics and Computer Science at the University of Catania in 2004 (respectively as assistant professor, associate professor in 2011 and full professor in 2016). He is currently Chairman of the undergraduate program in Computer Science, and Rector's delegate for Education (postgraduates and Phd). He is involved in research and directorship of the IPLab research lab (<http://iplab.dmi.unict.it>). He coordinates IPLab participation to large scale projects funded by national and international funding bodies, as well as by private companies. Prof. Battiato has participated as principal investigator in many international and national research projects. His research interests include image enhancement and processing, image coding, camera imaging technology and multimedia forensics. He has edited 6 books and co-authored about 200 papers in international journals, conference proceedings and book chapters. Guest editor of several special issues published on International Journals. He is also co-inventor of 22 international patents, reviewer for several international journals, and he has been regularly a member of numerous international conference committees. Chair of several international events (ICIAP 2017, VINEPA 2016, ACIVS 2015, VAAM2014-2015-2016, VISAPP2012-2015, IWCV2012, ECCV2012, ICIAP 2011, ACM MiFor 2010-2011, SPIE EI Digital Photography 2011-2012-2013, etc.). He is an associate editor of the SPIE Journal of Electronic Imaging. He is the recipient of the 2011 Best Associate Editor Award of the IEEE Transactions on Circuits and Systems for Video Technology. He is director (and co-founder) of the International Computer Vision Summer School (ICVSS), Sicily, Italy. He is a senior member of the IEEE.

Citation Scores (April 2017)

- **GoogleScholar** (<https://scholar.google.it/citations?hl=it&user=OplbtHgAAAAJ>)
 - H-index = 29
 - Total number of citations = 3531
- **Scopus** (<http://www.scopus.com/authid/detail.url?authorId=6603989025>)
 - H-index = 21
 - Total number of citations = 1769
- **ISI**
 - H-index=16
 - Total number of citations = 701

Professional Activities and Management

Teaching

- **Computer Vision** – CIMET Color in Informatics and Media Technology Master course - University Jean Monnet of Saint Etienne (Francia) – A.A.2011/2012.
- **Multimedia** - University of Catania- A.A. 2004/2005, A.A.2005/2006, A.A. 2006/2007, A.A. 2007/2008, A.A. 2008/2009, A.A. 2009/2010, A.A. 2010/2011, A.A. 2011/2012, A.A. 2012/2013;
- **Computer Vision** - University of Catania - A.A. 2006/2007, A.A. 2007/2008, A.A. 2008/2009, A.A. 2009/2010, A.A. 2010/2011, A.A. 2011/2012, A.A. 2012/2013, A.A. 2013/2014, A.A. 2014/2015, A.A. 2015/2016, A.A. 2016/2017.
- **Computer Forensics** - University of Catania, A.A. 2010/2011, A.A. 2011/2012, A.A. 2012/2013, A.A. 2013/2014, A.A. 2014/2015, A.A. 2015/2016, A.A. 2016/2017.
- **Video Processing** - University of Catania - A.A. 2005/2006;
- **Web Programming** - University of Catania- A.A.2005/2006; A.A. 2006/2007.
- **Analisi, progettazioni e simulazioni didattiche di Informatica IV** – University of Catania - A.A 2000/2001;
- **Programmazione 1** - University of Catania - A.A. 2001/2002;
- **Programmazione 2** - University of Catania - A.A. 2003/2004, A.A. 2004/2005, A.A. 2005/2006
- **Analisi, progettazioni e simulazioni didattiche di Informatica I** – University of Catania - A.A 2002/2003;
- **Multimedialità e Didattica** - University of Catania- A.A 2003/2004, A.A. 2004/2005, A.A.2005/2006;

Tutorship

- Advisor of more than 50 Master's Thesis – Computer Science - University of Catania
- Scientific Advisor of Dr. Filippo Stanco (December 2005 – September 2006) Post Doc position on Digital Image Restoration;
- Scientific advisor of Ing. Giovanni Puglisi (Ph.D in Computer Science and Post Doc). Main research topic: Video Stabilization.
- Scientific advisor of Dr. Giovanni Maria Farinella Puglisi (Post Doc). Main research topic: Scene Classification.
- Scientific advisor of Ing. Francesco Rundo (Ph.D. in Applied Mathematics). Main research topic: Soft Computing.
- Scientific Advisor of Rosetta Rizzo and Tony Meccio (Ph.D in Computer Science). Main topic: Image Generation Pipeline for Mobile Imaging Devices.
- Scientific Advisor of Giuseppe Messina (Ph.D in Computer Science). Main topic: Image Forensics.
- Scientific Advisor of Arcangelo Ranieri Bruna (Ph.D. in Applied Mathematics)- Main Research topics: Image Forensics.
- Scientific Advisor of Daniele Ravì (Ph.D in Computer Science). Main topic: Image Generation Pipeline for Mobile Imaging Devices.
- Scientific Advisor of Fausto Galvan (Ph.D in Computer Science). Main topic: Image Forensics.
- Scientific Advisor of Marco Moltisanti (Ph.D in Computer Science). Main topic: Computer Vision, Tracking and Recognition.
- Scientific Advisor of Oliver Giudice (Ph.D student in Math and Computer Science). Main topic: Computer Vision for Industrial Applications.
- Scientific Advisor of Antonino Furnari (Ph.D student in Math and Computer Science). Main topic: Computer Vision for Industrial Applications.

- Scientific Advisor of Filippo Milotta (Ph.D student in Math and Computer Science). Main topic: Computer Vision for Industrial Applications.
- Scientific Advisor of Alessandro Ortis (Ph.D student in Math and Computer Science). Main topic: Visual Sentiment Analysis.
- Scientific Advisor of Vito Santarcangelo (Ph.D student in Math and Computer Science). Main topic: Computer Vision for Retail.
- Scientific Advisor of Tiziana Rotondo (Ph.D student in Math and Computer Science). Main topic: Data Fusion.
- Scientific Advisor of Riccardo Di Pietro (Ph.D student in Math and Computer Science). Main topic: Multimedia Forensics.

Conferences/Invited Session

- General Chair together with Giovanni Gallo of ICIAP 2017 - *Image Analysis and Processing* – Catania, Italy (September 2017);
- Program Chair together with Francisco Imai of VISAPP 2016 – International Conference on *Computer Vision Theory and Applications* – Roma (Italy) – February 2016;
- General Chair together with Giovanni Gallo of ACIVS 2015 - *Advanced Concepts for Intelligent Vision Systems* – Catania (October 2015);
- Industrial Chair ICIAP 2015 – International Conference on *Image Analysis and Processing* – Genoa, Italy (September 2015);
- Program Chair together with Francisco Imai VISAPP 2015 – International Conference on *Computer Vision Theory and Applications* – Berlin (Germany) – March 2015;
- Co-chair insieme a Cosimo Distanto e Andrea Cavallaro del Workshop su *Video Analytics and Audience Measurement in Retail and Digital Signage* – in conjunction with ICPR 2014 – Stockholm (SW) - August 2014;
- Co-chair with Giovanni Gallo and Filippo Stanco of minisymposium on “*Image and Video for Industrial applications*”, SIMAI 2014, Taormina (Italy) – June 2014;
- Program Chair VISAPP 2014 – International Conference on *Computer Vision Theory and Applications* – Lisboa (Portugal) – January 2014;
- Publicity Chair *Digital Photography X-XI – IS&T/SPIE Electronic Imaging 2014-2015* - San Francisco, USA, 2014-2015;
- Program Chair VISAPP 2013 – International Conference on *Computer Vision Theory and Applications* – Barcelona (Spain) – February 2013;
- Co-chair International Workshop on Computer Vision - *IWCV 2012* – Ortigia (Italy) – May 2012;
- Co-Chair (Video Proceedings) *ECCV 2012*– 2012 Firenze (Italy);
- Program Chair (Computational Colour) CGIV2012 - 6th *European Conference on Colour in Graphics, Imaging, and Vision* - Amsterdam (The Netherlands)- 2012;
- Area Chair (Image Formation and Preprocessing) VISAPP 2012 – *International Conference on Computer Vision Theory and Applications* – Rome (Italy) – February 2012;
- Program Chair of *ICIAP 2011 – International Conference on Image Analysis and Processing* - Ravenna (Italy), September 2011;
- Co-chair *Digital Photography VII- VIII–IX - IS&T/SPIE Electronic Imaging 2011-2012-2013*- San Francisco, USA, 2011-2012-2013
- Co-chair together with S. Emmanuel, A. Ulges and M. Worring of Workshop *ACM Multimedia in Forensics, and Intelligence - MiFor2011* – USA, 2011.
- Co-chair together with S. Emmanuel, A. Ulges and M. Worring of Workshop *ACM Multimedia in Forensics, Security and Intelligence - MiFor2010* – Florence (Italy), 2010.

- Co-chair with M. Emre Celebi and Filippo Stanco Special Session on *Digital Imaging in Cultural Heritage* c/o *International Symposium on Image and Signal Processing and Analysis* (ISPA 2013) – Trieste (Italy) – September 2013;
- Co-Chair “*Digital Forensics – Individuazione, Acquisizione e Utilizzo della Prova Digitale*” – Dipartimento di Matematica ed Informatica - University of Udine - November 2012;
- Co-chair special session on “*Information Processing and Management of Uncertainty in Knowledge-Based Systems*” – 14th International Conference on Information Processing and Management of Uncertainty in Knowledge-based Systems - IPMU 2012 – Catania (Italy), 2012;
- Co-chair of “*Image and Video Forensics*”, SIMAI 2010, Cagliari (Italy) –2010;
- Co-chair of “*Image Analysis Methods for Cultural Heritage*”, SIMAI 2010, Cagliari (Italy) –2010;
- Workshop “*Medical and Industrial Imaging*” , June 2008 Catania (Italy);
- Co-chair of “*Image Analysis Methods for Cultural Heritage*”, SIMAI 2008, Roma (Italy) –2008;
- Co-chair of “*Image Analysis Methods for Industrial Applications*” SIMAI 2006, Ragusa (Italy) , 2006;
- Co-chair and local organizer of 4° Convegno EUROGRAPHICS Italian Chapter (EG_IT) (<http://www.dmi.unict.it/~eg06>), February 2006;

International School

Director (together with Prof. Roberto Cipolla, Univ. of Cambridge and G.M. Farinella, Univ of Catania) of ICVSS, International Computer Vision Summer School (www.dmi.unict.it/icvss):

- *Detection, Recognition and Segmentation in Context*, Ragusa, Italy – July 2007;
- *Reconstruction and Recognition*, Ragusa, Italy – July 2008;
- *Machine Learning for Computer Vision*, Ragusa, Italy – July 2009;
- *Registration and Video Analysis*, Ragusa, Italy – July 2010;
- *Registration, Recognition and Reconstruction in Images and Video*, Ragusa, Italy – July 2011;
- *3R's of Computer Vision: Registration, Recognition and Reconstruction*, Ragusa, Italy – July 2012;
- *Computer Vision and Machine Learning*, Capo Rizzuto (Crotone), Italy – July 2013;
- *From Fundamentals to Applications*, Ragusa, Italy – July 2014;
- *Learning to See* - Sampieri, Ragusa (Italy) - July 2015.
- *Computer Vision: What Happens Next?* - Sampieri, Ragusa (Italy) - July 2016.

National School

Director (together with Prof. Giovanni Gallo and Filippo Stanco) of Italian Ph.D. school “*La Visione delle Macchine*” - GIRPR – Catania November 2010 (<http://iplab.dmi.unict.it/vismac>);

International Program Committee (IPC)

- Third IEEE International *Ph.D. Workshop on Multimedia Computing Research* as part of IEEE International Symposium on Multimedia (ISM 2014);
- IS&T/SPIE Electronic Imaging - *Media Watermarking, Security, and Forensics* - 2014-2015;
- *Ultra Wide Context and Content Aware Imaging* - PANORAMA 2014 - In conjunction with the 9th International Joint Conference on Computer Vision, Imaging and Computer Graphics Theory and Applications - VISIGRAPP 2014;
- International Workshop on *Video and Image Ground Truth for Computer Vision Applications* (VIGTA'13) in conjunction with the 9th International Conference on Computer Vision Systems (ICVS 2013);

- ACM International Workshop on *Multimedia Analysis for Ecological Data* – (Nara 2012 – Barcelona 2013) (in conjunction with ACM Multimedia 2012-2013);
 - 26th IEEE *International Symposium on Computer-Based Medical Systems* (CBMS) - Special Track on "Computer-assisted analysis of capillaroscopic images", 2013;
 - 11th IEEE *Image, Video and Multidimensional Signal Processing* (IVMSP) - Workshop on "3D Image/Video Technologies and Applications" - Seoul (Korea), June 2013;
 - 16th International Conference on Network-Based Information Systems (NBIS-2013) - Multimedia Systems and Applications track – Gwangju (Korea) - September 2013;
 - The Sixth International Conference on Complex, Intelligent, and Software Intensive Systems (CISIS-2012) –Track: Multimedia Systems and Virtual Reality in conjunction with IMIS 2012 – Palermo, Italy, 2012;
 - International Workshop on *Multimedia for Cultural Heritage* (MM4CH 2011) – Modena, Italy, 2011;
 - ECV – IEEE Workshop on *Embedded Computer Vision* (2011-2012-2013-2014), in conjunction with CVPR;
 - IMAGAPP – International Conference on *Imaging Theory and Applications* (Algarve, Portugal 2011);
 - Special session on *Video and Image Analysis* (VIA) at the 3rd Asian Conference on Intelligent Information and Database Systems (ACIIDS), 2011;
 - EUVIP – European Workshop on *Visual Information Processing* (Paris, France 2011);
 - International Workshop on *Content Protection & Forensics* (CPAF 2011) – Satellite Event of ICME 2011 (Barcelona, Spain);
 - 3rd Workshop on *Computational Intelligence for Multimedia Visual Information Processing* (CIMVIP'2011) hosted by ISDA 2011;
 - Special Track on Low-Level Color Image Processing - 6th International Symposium on Visual Computing (ISVC10), 2010;
 - Workshop on Soft Computing in Image Processing and Computer Vision – SCIPCV 2010-2011;
 - IS&T/SPIE Electronic Imaging – Digital Photography 2010;
 - ICISP – International Conference on Image and Signal Processing (2010 Trois-Rivières, Québec, Canada – 2012 Morocco - 2014 Normandy, France) – Papers published on Lecture Notes in Computer Science (Springer);
 - AVSS'09 – 6th IEEE International Conference on *Advanced Video and Signal Based Surveillance*;
 - ACM SCCG (*Spring Conference on Computer Graphic*), Budmerice (SK) 2005, 2006, 2007, 2008, 2009;
 - International Workshop on *Computer Graphics and Geometric Modeling*– Workshop of ICCS *International Conference on Computational Science*(2007 Beijing, China – 2008, Krakow, Poland, – 2009 Louisiana,USA) – Papers published on *Lecture Notes in Computer Science* (Springer) – (Vol. 4488, 2007 - Vol 5102, 2008 - Vol. 5544, 2009);
 - IAPR “*Color Computational Color Imaging Workshop Imaging*” – (2007-2009-2011-2013-2015).
 - Track *Scalable Pattern Recognition* of International Conference *Mexican Computer Science Society*, 2007;
 - VISAPP – International Conference on *Computer Vision Theory and Applications* – (Madeira, Portugal 2008 – Lisboa, Portugal 2009 – Angers, France 2010 – Algarve, Portugal 2011);
- Member of Editorial Board (Reviewer) of:
- SIBIGRAPI 2014;
 - SIGGRAPH Asia 2013;

- ICIAP 2013 - International Conference on *Image Analysis and Processing*;
- ISCC 2013 – International Conference on *Information Science and Cloud Computing*;
- IEEE Workshop on Applications of Computer Vision (WACV 2013-2014);
- Demo Track - ECCV 2012 – European Conference on Computer Vision;
- IEEE International Conference on Computer Science and Information Technology (ICCSIT 2011);
- European Signal Processing Conference EUSIPCO 2010;
- IAPR ICPR 2010-2012-2014 – International Conference on Pattern Recognition;
- AVSS'10, AVSS'12– IEEE International Conference on *Advanced Video and Signal Based Surveillance*;
- IEEE ISCS'10 - International Symposium on Circuits and Systems;
- ACM Multimedia 2009 – Workshop on Multimedia Forensics;
- IEEE ISCE –International Symposium on Consumer Electronics (2009, 2010);
- SIGGRAPH 2009-2011;
- *Eurographics* 2008, 2010;
- 3DTV- CON 2009, 2010, 2011,2012,2014 : *The True Vision - Capture, Transmission, and Display of 3D Video* International Conference;
- ICCSA 2008 - International Conference on Computational Science and Its Application;
- *Eurographics* 2008;
- IEEE ICME 08 – International Conference on *Multimedia ed Expo*;
- WSCG (International Conference in Central Europe on *Computer Graphics, Visualization and Computer Vision*) 2004-2006-2007-2008-2009-2010-2011-2012-2013;
- IEEE ICIP 2005, 2008, 2009, 2010, 2011, 2012, 2013, 2014 - International Conference on *Image Processing*;
- IEEE ISCC'02 – International Symposium on *Computer and Communication*;
- Security Track@ACM SAC 2004.

National Program Committee

- Conference *Eurographics Italian Chapter* (Catania – 2006, Trento - 2007);
- Conference *ArcheoFOSS – VIII Edizione* - Catania 2013;

Editorial Activities

- Member of the *Editorial Board of the Transactions on Circuits and System for Video Technology* published by IEEE (2011-2014).
- Member of *Editorial Board of Journal of Electronic Imaging* (JEI) published by SPIE/IS&T (since 2007).
- Member of *Editorial Board of Recent Patents on Electrical Engineering* published by *Bentham Science Publisher* (2008-2011).
- Member of *Editorial Board of The Open Virtual Reality Journal* published by *Bentham Science Publisher* (since 2008).
- Member of *Editorial Board of Sicurezza e Giustizia* (since 2012).
- *Invite Reviewer* for the following journals:
 - IEEE Transactions on Image Processing (since 2003) ;
 - EURASIP Journal of Applied Signal Processing (since 2003);
 - IASTED Journal of Modelling and Simulation (since 2003);
 - IST/SPIE Journal of Electronic Imaging (since 2004);

- IEE Proceedings, Vision, Image & Signal Processing (since 2004);
- IST/SPIE Optical Engineering (since 2004);
- IEEE Signal Processing Letters (since 2004);
- IEEE Transactions on Circuits and Systems for VideoTechnology (since 2004);
- IEE Electronic Letters (since 2004);
- ELSEVIER, Image Vision and Computing Journal (since 2005);
- EUROGRAPHICS, Computer Graphics Forum (since 2005);
- IEEE Transactions on Visualization and Computer Graphics (since 2006);
- International Journal of Imaging Systems and Technology; Special Issue on "Applied Color Image Processing" (2007);
- ELSEVIER Signal Processing: Image Communication; Special Issue on *Semantic Analysis for Interactive Multimedia* – (2007);
- IEEE Transactions on Systems, Man, and Cybernetics--Part B: Cybernetics (since 2009);
- Springer - Journal of Mathematical Imaging and Vision (since 2009);
- IEEE Transactions on Multimedia (since 2009);
- IS&T/SPIE Journal of Imaging Science and Technology (since 2010);
- Springer – Pattern Analysis and Application (since 2010).
- IEEE Transactions on Broadcasting (since 2010);
- IEEE Transactions on Information Forensics and Security (since 2010);
- Springer Signal Image and Video Processing (since March 2011);
- IEEE Journal of Selected topics in Signal Processing (since February 2011);
- Springer – Signal Processing Journal (since 2011);
- ELSEVIER - Journal of Visual Image Communication and Representation (since 2012);
- HINDAWI - Journal of Electrical and Computer Engineering (since 2012);
- ELSEVIER – Computer and Electrical Engineering (since 2012);
- IEEE Transactions on Systems Man and Cybernetics Part A/Systems (since 2013);
- ACM Journal on Computing and Cultural Heritage (since 2013);
- ELSEVIER – Parallel Computing (since 2013);
- ELSEVIER - Computer Vision and Image Understanding (since 2014).
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- Invite Reviewer (1 chapter):
Single-Sensor Imaging: Methods and Applications for Digital Cameras, Ed. R. Lukac – CRC Press (2008).
- Reviewer of some editorial proposals for *John Wiley & Sons* (2009), and *Elsevier* (2011).

- He is **Senior Member** of IEEE (*The Institute of Electrical and Electronics Engineers*) since 2006;
- He is Member of IAPR-IC (*International Association Pattern Recognition – Italian Chapter*);

Management

- Scientific management of IPlab@CT, Image Processing Lab (www.dmi.unict.it/~iplab) at Computer Science Department, University of Catania.
- He is a member (since 2007) of the Technical Committee of a joint research lab between STMicroelectronics and IPLab.
- He has worked in STMicroelectronics (Catania) -AST (Advanced System Technology) where he lead a research group in the field of *Digital Still Camera & Multimedia Innovation*.

Scientific Cooperations

University of Catania (G. Gallo, D. Cantone, D. Catalano, G. Bella, S. Riccobene, F. Stanco, G. Cincotti, A. Pulvirenti, G. Giuffrida), STMicroelectronics (M. Mancuso, A. Bruna, A. Castorina, G. Messina, A. Buemi, M. Guarnera, A. Capra, A. Vitali), University of Cambridge (UK) (R. Cipolla), University of Palermo (E. Ardizzone, M. La Cascia), University of Milano Bicocca (R. Schettini, F. Gasparini), a WPI University (USA) (M. Hofri), Queen Mary University of London (UK) (A. Cavallaro), Aalborg University (DK) (S. Livatino), IBM Watson Research Center (USA) (R. Gennaro), Università of Calabria (P. Pantano, E. Bilotta), Epson Ltd, Canada (R. Lukac), Imperial College (UK) (C. Sismeiro), ITWM Fraunhofer Institute (D) (J. Orlik, A. Heiko, A. Zemitis), Hong Kong Polytechnic University (HK) (L. Zhang), Canon Development America (USA) (F. Imai), University of Amsterdam (N) (M. Worrington), University of Saint Etienne (France) (A. Tremeau) - CVSSP - Centre for Vision, Speech and Signal Processing of University of Surrey (UK), M. Bober.

Project Evaluation

- *Research Promotion Foundation (RPF) of Cyprus - PENEK program – 2009.*
- *Netherlands Organisation for Scientific Research (NWO) - NWO Physical Sciences – 2009.*
- *FinPiemonte – Poli di Innovazione 2010/2011/2012.*
- *Ministro per lo Sviluppo Economico (Italian Minister) – since 2009.*
- *Partnership Programme - Joint Applied Research Projects – PCCA of Romanian – 2012-2013.*
- *Technical Officer – Invitalia (since 2012);*
- *MIUR/Anvur – PRIN 2012.*
- *MIUR/Anvur – FIRB Futuro in Ricerca 2013.*

Research Contracts/Projects

- Research contract with AST Catania Lab of STMicroelectronics on “Resolution Enhancement” (2004).
- Research contract with AST Catania Lab di STMicroelectronics on “*Raster_to_SVG*”. (2005).
- Research contract with *MagicMosaics* (Victoria - Canada), www.imagemosaics.com on PIM (*Puzzle Image Mosaic*).
- Research project entitled: “*Sviluppo di materiali e tecnologie per una nuova gamma di Artroprotesi di ginocchio ad elevata flessibilità applicativa*” – FAR – L.297. Involved partners are LIMA (Ud), Dipartimento di Ingegneria Industriale e Meccanica, il Dipartimento di Matematica ed Informatica (University of Catania), Fraunhofer Institut für Techno- und Wirtschaftsmathematik of Kaiserslautern (D) . Specific task of our group has regarded the 3D Bone Segmentation starting from CT data. (July 2005 – September 2007).
- Research contract with AST Catania Lab di STMicroelectronics on “*Video Stabilization*” (July 2006 – July 2008).
- Research contract with AST Catania Lab di STMicroelectronics on “*Image Content Analysis*” (May 2010 – May 2011).
- Research Contract with INFORM entitled “*DIAGNOSTICA PER IMMAGINI-DIMAGO*”, (January 2007 - December 2007).
- Research project PANORAMA Ultrawide Context Aware Imaging (ENIAC program) (36 months start date: April 2012) in partnership with STM, Bosch, Philips and other European partners.

- Research project DIGINTEGRA (National project) in partnership with Consorzio Catania Ricerche and EdisonWEB, A-Tono, GlobalProject Finance, APOMercato (30 months –Start date January 2012);
- Research project EMOCUBE (National Project) in partnership with EdisonWEB (24 months –Start date January 2012);
- Research project Farm.Pro (National Project) in partnership with FarmaciaServizi spa (24 months – Start date January 2012);
- Research contract with Imaging Division- STMicroelectronics – Grenoble on “*Development di Direct Focus Algorithm*” (May 2013 – November 2013).
- Research contract with AST Catania Lab di STMicroelectronics on “*Smoke Detection*” (August 2013 – February 2014).
- Research contract with AST Catania Lab di STMicroelectronics on “*Compressed Descriptors for Deformable Objects*” (May 2013 – May 2014).
- Research contract with TechLabWorks on “*Advanced GUI Kinect*” (May 2013 – December 2013).
- Research contract with INGV Catania on “*Sismic data monitoring*” (August 2014 – April 2015).
- Research contract with JOL Wave Telecom on “*Multi-Device Ecosystem for Multimedia Services*” (September 2014 – April 2015).

Scientific Research

Main topics

- **Image (and Video) Enhancement/Coding for Imaging Devices**
- **Image and Video Forensics**
- **Image and Video Understanding**

Publications and Patents (The electronic version of the papers is available at the following public repository:
<http://iplab.dmi.unict.it/publications/all>)

Ph. D. Thesis

Metodi Statistici ed Entropici per l'Apprendimento e l'Analisi Automatica di Immagini Digitali (Statistical and Entropy based methods for unsupervised learning and analysis of digital images). Ph. D. in Applied Mathematic and Computer Science. Tutor: Prof. A. Maugeri. Scientific Advisor: Prof. Giovanni Gallo. University of Naples (Italy), 1999.

Books

- [CB1] ***Computer Vision: Recognition, Registration and Reconstruction*** - Eds. R. Cipolla, S. Battiato, G.M. Farinella - *Studies in Computational Intelligence* – Springer-Verlag press, ISBN: 978-3-642-12847-9 - Vol. 285, 2010.
- [CB2] ***Image Processing for Embedded Devices*** – Eds. S. Battiato, A.R. Bruna, G. Messina, G. Puglisi – ISSN: 1879-7458, 2010 - *Applied Digital Imaging* ebook series, ISBN: 978-1-60805-170-0 – Bentham Science Publisher, 2010.
- [CB3] ***Digital Imaging for Cultural Heritage Preservation: Analysis, Restoration and Reconstruction of Ancient Artworks*** - Eds. F. Stanco, S. Battiato, G. Gallo - *CRC Press/Taylor & Francis - Digital Imaging and Computer Vision Book series*, ISBN: 1439821739, 2011.
- [CB4] ***Machine Learning for Computer Vision*** - Eds. R. Cipolla, S. Battiato, G.M. Farinella - *Studies in Computational Intelligence* – Springer-Verlag press, ISBN 978-3-642-28660-5, Vol. 411, 2012;
- [CB5] ***Advanced Topics in Computer Vision*** - Eds. G. M. Farinella, S. Battiato, R. Cipolla - *Advances in Computer Vision and Pattern Recognition* - Springer-Verlag press – ISBN: 978-1-4471-5519-5, Vol. 433, 2013.
- [CB6] ***Registration and Recognition in Images and Videos*** - Eds. R. Cipolla, S. Battiato, G.M. Farinella - *Studies in Computational Intelligence* – Springer-Verlag press - ISBN 978-3-642-44907-9, Vol. 532, 2014.
- [CB7] ***Computer Vision, Imaging and Computer Graphics – Theory and Applications*** - Eds. Battiato, S., Coquillart, S., Laramée, R.S., Kerren, A., Braz, J. (Eds.) - International Joint Conference, VISIGRAPP 2013- Revised Selected Papers - *Communications in Computer and Information Science*, ISBN 978-3-662-44910-3 - Vol. 458, 2014.
- [CB8] ***Computer Vision, Imaging and Computer Graphics – Theory and Applications*** - Eds. Battiato, S., Coquillart, S., Laramée, R.S., Kerren, Pettrè, J., A., Braz, J. (Eds.) - International Joint Conference, VISIGRAPP 2014- Revised Selected Papers - *Communications in Computer and Information Science*, (2014 - In press).

Book's chapter (International)

- [IB1] S. Battiato, G. Gallo - **Multi-resolution Clustering of Texture Images** – Chapter in *Texture Analysis in Machine Vision*, Ed. M. Pietikäinen - Series in Machine Perception and Artificial Intelligence - World Scientific, Vol. 40, pp.41-51 - ISBN 981-02-4373-1, October 2000;
- [IB2] S. Battiato, A. Castorina, G. Messina - **Exposure Correction for Imaging Devices: an Overview** – Chapter in *Single-Sensor Imaging: Methods and Applications for Digital Cameras*, Ed. R. Lukac – CRC Press - ISBN 978-1-4200-5452-1, September 2008;
- [IB3] S. Battiato, R. Lukac - **Color-Mapped Imaging** - In *Encyclopedia of Multimedia*, 2nd edition, (ed.) B. Furth – pp.83-88 - Springer-Verlag – ISBN: 978-0-387-74724-8, October 2008. Including short articles: *Dithering* (pp.198-199), *GIF Format* (pp.272-273), *Median Cut Algorithm* (pp.417-418), *Reindexing Techniques* (pp.768-769).
- [IB4] S. Battiato, R. Lukac - **Video Stabilization Techniques** - In *Encyclopedia of Multimedia*, 2nd edition, (ed.) B. Furth – pp.941-945 - Springer-Verlag - ISBN: 978-0-387-74724-8, October 2008. Including short articles: *Camera Motions* (pp.57-58), *Exposure Values* (pp.217-218), *Motion Blurring* (pp. 428-429).
- [IB5] G.M. Farinella, S. Battiato - **Representation Models and Machine Learning Techniques for Scene Classification** – Chapter in *Pattern Recognition, Machine Vision, Principles and Applications*, Ed. P. S.P. Wang- ISBN 978-87-92329-36-3 - River publisher, 2010;
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- [IC80] S. Battiato, G. Puglisi, R. Rizzo - **Characterization of Signal Perturbation Using Voting Based Curve Fitting for Multispectral Images**– In Proceedings of IEEE ICIP 2010 - International Conference on *Image Processing* – Hong Kong, September 2010;
- [IC81] S. Battiato, G. Puglisi – **3D Ancient Mosaics** – In Proceedings of ACM Multimedia – Technical Demo – Florence (Italy), October 2010;
- [IC82] S. Battiato, G.M. Farinella, G.C. Guarnera, T. Meccio, G. Puglisi, D. Ravì, R. Rizzo - **Bags of Phrases with Codebooks Alignment for Near Duplicate Image Detection** – In Proceedings of ACM Multimedia – Workshop *Multimedia in Forensics, Security and Intelligence* (MiFor 2010) – Florence (Italy), October 2010;
- [IC83] S. Battiato, A.R. Bruna, G. Puglisi – **Random-temporal Block Selection for Video Stabilization** - In Proceedings of SPIE Electronic Imaging 2011 - Digital Photography VII- Vol. 7876 - San Francisco (CA, USA) – January 2011;
- [IC84] G. Puglisi, S. Battiato - **Fast Block Based Local Motion Estimation for Video Stabilization** – In Proceedings of Seventh IEEE Workshop on *Embedded Computer Vision* (ECVW2011) – In conjunction with CVPR 2011 – Colorado Springs, USA – June 2011;
- [IC85] S. Battiato, G. M. Farinella, E. Messina, G. Puglisi - **Understanding Geometric Manipulations of Images Through BOVW-Based Hashing** – In Proceedings of International Workshop on Content Protection & Forensics (CPAF 2011) – Satellite Worskhop of IEEE ICME 2011 – Barcellona (Spain) - July 2011.
- [IC86] S. Battiato, G. Puglisi - **Robust Video Stabilization Approach Based on a Voting Strategy** - In Proceedings of IEEE International Conference on Image Processing - ICIP 2011 - Brussels, September 2011;

- [IC87] S. Battiato, G. M. Farinella, E. Messina, D. Ravì, G. Puglisi - ***Computer Vision on Mobile Devices: a Few Case Studies*** – In Proceedings of STDay 201 – Turin (Italy), September 2011;
- [IC88] S. Battiato, G. M. Farinella, E. Messina, G. Puglisi - ***Robust Image Registration and Tampering Localization Exploiting Bag of Features Based Forensic Signature*** - In Short Proceedings of ACM Multimedia 2011 – Scottsdale (USA), December 2011;
- [IC89] S. Battiato, G. M. Farinella, E. Messina, G. Puglisi - ***A Forensic Signature Based on Spatial Distributed Bag of Features for Image Alignment and Tampering Detection*** - In Proceedings of International ACM Workshop on Multimedia in Forensics and Intelligence MIFOR 2011-Satellite workshop of ACM Multimedia 2011 – Scottsdale (USA), December 2011;
- [IC90] S. Battiato, G. M. Farinella, E. Messina, G. Puglisi, D. Ravì, A. Capra, V. Tomaselli - ***On the Performances of Computer Vision Algorithms on Mobile Platforms*** – In proceedings of Electronic Imaging 2012- Digital Photography VIII- Vol. 8299 - San Francisco (CA, USA) – January 2012;
- [IC91] S. Battiato, G. M. Farinella, N. Grippaldi, G. Puglisi – ***Content-based Image Resizing on Mobile Devices*** – In proceedings of VISAPP 2012 – International Conference on Computer Vision Theory and Applications – Rome (Italy) – February 2012.
- [IC92] F. Ravì, S. Battiato - ***A Novel Computational Tool for Aesthetic Scoring of Digital Photography*** – In Proceedings of 6th European Conference on Colour in Graphics, Imaging, and Vision - CGIV 2012, Amsterdam (NL), May 2012;
- [IC93] S. Battiato, G. M. Farinella, G. Puglisi, F. Ravì - ***Content-Aware Image Resizing With Seam Selection Based On Gradient Vector Flow*** – In Proceedings of IEEE International Conference on Image Processing - IICIP 2012 – Orlando (USA), October 2012;
- [IC94] S. Battiato, G. M. Farinella, G. Puglisi, F. Ravì - ***Image Resizing Based on Gradient Vector Flow Analysis*** – In Proceedings of STDAY 2012 – Milano – October 2012
- [IC95] S. Battiato, G. M. Farinella, O. Giudice and G. Puglisi - ***Aligning Bags of Shape Contexts for Blurred Shape Model Based Symbol Classification***, In Proceedings of International Conference on Pattern Recognition (ICPR) – November 11-15, 2012 Tsukuba (Japan);
- [IC96] A. Castorina, I. Guarneri, A. Capra, S. Battiato and G. M. Farinella - ***PCA based Shape Recognition for Capacitive Touch Display*** – In Proceedings of IEEE International Conference on Consumer Electronics (ICCE), Las Vegas, USA, 11-14 January 2013;
- [IC97] I. Guarneri, A. Capra, S. Battiato and G. M. Farinella - ***Shape Recognition for Capacitive Touch Display*** - To appear in Proceedings of SPIE-IS&T Electronic Imaging 2013 - Image Processing: Machine Vision Applications VI (EI117), California, United States, 3-7 February 2013;
- [IC98] S. Battiato, M. Moltisanti, F. Ravì, A. R. Bruna and F. Naccari - ***Aesthetic Scoring of Digital Portraits for Consumer Applications*** - In Proceedings of SPIE-IS&T Electronic Imaging 2013 Digital Photography IX (Vol. 8660) - California, United States, 3-7 February 2013;
- [IC99] S. Battiato, A.R. Bruna, G.M. Farinella, G.C. Guarnera - ***Counterfeit Detection and Value Recognition of Euro Banknotes*** - In Proceedings of VISAPP 2013 – Barcelona (Spain) – February 2013;
- [IC100] A. Bosco, D. Giacalone, S. Battiato, A.R. Bruna, R. Rizzo - ***Signal Activity Estimation with Built-in Noise Management in Raw Digital Images*** – In Proceedings of VISAPP 2013 – Barcelona (Spain) – February 2013;
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- [IC102] G. Puglisi, A.R. Bruna, F. Galvan, S. Battiato - ***First Jpeg Quantization Matrix Estimation Based on Histogram Analysis*** – In Proceedings of IEEE International Conference on Image Processing – IICIP 2013 – Melbourne (Australia) – September 2013;

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- [IC105] S. Battiato, G. Puglisi, R. Rizzo, A. Bosco, A. R. Bruna - ***Image Sensor Noise Profiling by Voting Based Curve Fitting*** - IS&T/SPIE Electronic Imaging – *Digital Photography X* – San Francisco (USA) – February 2014;
- [IC106] D. Moltisanti, G. M. Farinella, S. Battiato and G. Giuffrida - ***Web Scraping of Online Newspapers via Image Matching*** – In Proceedings of ECMI 2014 – June 2014;
- [IC107] S. Battiato, G. M. Farinella, A. Furnari and G. Puglisi - ***A Customized System for Vehicle Tracking and Classification*** – In Proceedings of ECMI 2014 – June 2014
- [IC108] A. Furnari, G. M. Farinella, G. Puglisi, A. R. Bruna, S. Battiato - ***Affine Region Detectors on the Fisheye Domain*** – In Proceedings of IEEE International Conference on *Image Processing ICIP* – Paris, France – October 2014;
- [IC109] G. M. Farinella, M. Moltisanti, S. Battiato - ***Classifying Food Images Represented as Bag of Textons*** – In Proceedings of IEEE International Conference on *Image Processing ICIP* - Paris, France – October 2014;
- [IC110] A. Ortis, S. Battiato - ***A New Fast Matching Method for Adaptive Compression of Stereoscopic Images*** - In Proceedings of IS&T/SPIE Electronic Imaging – *Three-Dimensional Image Processing, Measurement (3DIPM), and Applications 2015* – Vol. 9393 – San Francisco (USA) – February 2015;
- [IC111] M. V. Giuffrida, G. M. Farinella, S. Battiato, M. Guarnera - ***Exploiting Time-Multiplexing Structured Light with Picoprojectors*** - In Proceedings of IS&T/SPIE Electronic Imaging - *Three-Dimensional Image Processing, Measurement (3DIPM), and Applications 2015* – Vol. 9393 – San Francisco (USA) – February 2015;
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- [IC113] D. Moltisanti, G.M. Farinella, R. E. Musumeci, E. Foti, S. Battiato - ***Monitoring Accropodes Breakwaters Using RGB-D Cameras*** – In Proceedings of VISAPP 2015 – Berlin (DE) – February 2015;
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- [IC115] A. Ortis, G. M. Farinella, V. D’Amico, L. Addesso, G. Torrisi, S. Battiato, ***RECFusion: Automatic Video Curation Driven by Visual Content Popularity***, In Short Proceedings of ACM Multimedia, (Australia), October 2015;
- [IC116] F. Milotta, S. Battiato, F. Stanco, V. D’Amico, G. Torrisi, L. Addesso, ***RECFusion: Automatic Scene Clustering and Tracking in Videos from Multiple Sources***- In Proceedings of IS&T Electronic Imaging 2016, San Francisco (USA), February 2016.
- [IC117] M. Moltisanti, S. Battiato, G.M. Farinella, A.R. Bruna - ***Exploiting Visual Saliency for Car Detection and Tracking*** - In Proceedings of IS&T Electronic Imaging 2016, San Francisco (USA), February 2016

Patents

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- Publication, US 20060125932A1 September 2006) - **US7106913B2**, September 2006 - US Patent (Application US 11445696, June 2006) **US7680359**, March 2010.
- [P2] S. Battiato, M. Mancuso – *Optimized Quantization Method for Compressing Digital Images* – European Patent Pending (Application EP - 01830738.9, 2001 - Publication EP 1317145 A1, June 2003);
- [P3] S. Battiato, M. Mancuso – *Method of Compressing Digital Images Acquired in CFA Format* - European Patent (Application EP - 01830765.2, 2001), **EP 1320267 B1**, November 2005 - US Patent (Application US20020319405, 2002 - Publication US 2003197898 A1, October 2003), US Patent **US7206458 B2**, April 2007;
- [P4] A. Castorina, M. Mancuso, S. Battiato – *Method for Contrast Enhancement in Colour Digital Image* – European Patent Pending (Application EP - 01830803.1, 2001 – Publication EP 1326209 A1, July 2003) - US Patent (Application US20020323589, 2002 - Publication US 2003218679 A1, November 2003), US Patent **US7227991 B1**, June 2007 - JP Patent Pending (Application JP20020331847, 2002 - Publication JP 2003199115, November 2003);
- [P5] G. Messina, S. Battiato, M. Mancuso – *Method for Obtaining a High Resolution Digital Image* - European Patent Pending (Application EP - 02425262.9, 2002 - Publication EP 1357514 A1, October 2003) - US Patent (Application US 10/420532, 2003 - Publication US 20040027488 A1, February 2004), US Patent **US7260277**, August 2007;
- [P6] G. Messina, M. Mancuso, S. Battiato - *Processing Method for Obtaining a High Resolution Digital Image* – European Patent (Application EP - 02425382.5, 2002) **EP 1372335 B1**, December 2003 – US Patent (Application US 20030457841, 2003 - Publication, US 20040032511 A1, February 2004), US Patent **US7257275**, August 2007;
- [P7] A. Bosco, S. Battiato – *Method for Filtering the Noise of a Digital Image Sequence* – European Patent Pending (Application EP - 02425532.5, 2002 - Publication EP 1394742 A1, March 2004) - US Patent (Application US 20030648776, June 2003 - Publication US 2004119861 A1, June 2004), **US7734110**, June 2010;
- [P8] A. Vitali, L. Della Torre, S. Battiato, A. Buemi - *Method and System for Processing Signals via Perceptive Vectorial Quantization, Computer Program Product Therefore* - European Patent Pending (Application EP 02425601.8, 2002 – Publication EP 1406447 A1, April 2004) – US Patent (Application US 20030674903, September 2003- Publication US 2004120594 A1, June 2004) **US7742521**, June 2010;
- [P9] A. Castorina, S. Battiato, M. Guarnera, F. Vella - *Method and System for Processing Video Signals, for Example for Displaying on a Small Sized Color Display, and Corresponding Computer Program Product* – European Patent pending, No. TO 02A001072, December 2002 - US Patent (Application US 20030732186, 2003- Publication US 2004174441 A1, September 2004), **US7630003B2**, December 2009;
- [P10] G. Messina, S. Battiato, A. Castorina, L. Plaza – *Image Processing Method for Digital Images with Exposure Correction by Recognition of Skin Areas of the Subject* - European Patent **EP1482724B1**, July 2007 (Application EP - 03291155.4, 2003 - Publication EP 1482724 A1, December 2004) - *Digital Image Processing Method Having an Exposure Correction Based on Recognition of Areas Corresponding to the Skin of the Photographed Subject* - US Patent (Application US 10/848815, 2004 - Publication US 2005018923 A1, January 2005), **US7778483** , August 2010;
- [P11] S. Battiato, A. Castorina, M. Guarnera, P. Vivirito – *Digital Image Processing Method for Adaptive Sharpening* – European Patent Pending (Application EP 03425388.0 – 2003 - Publication, EP 1486916 A1, December 2004);
- [P12] S. Curti, S. Battiato, E. Scordato, M.Tortora, E. Ardizzone, M. La Cascia - *Method for Classifying a Digital Image* - European Patent Pending (Application EP 04015830.5 – 2004; Priority: IT/ITA MI2003A001449 – 2003 – Publication EP 1507232 A2, February 2005) – US Patent (Application US 10/983153, 2004 - Publication US2005129316 A1, June 2005) **US7929756**, April 2011;

- [P13] S. Curti, S. Battiato, E. Scordato, M. Tortora, E. Ardizzone, M. La Cascia - **Method of Obtaining a Depth Map from a Digital Image** - European Patent Pending (Application EP 04076850.9-2218 – 2004; Priority: IT/ITA RM2003A000345 – 2003 - Publication EP 1498847 A3, January 2005) - US Patent (Application US 0893103, 2004 - Publication US 2005053276, March 2005) **US7668377**, February 2010;
- [P14] F. Naccari, A. Castorina, A.R. Bruna, A. Capra, S. Cariolo, S. Battiato, G. Gallo - **Method of Generating a Mask Image of Membership of Single Pixels to Certain Chromaticity Classes and of Adaptive Improvement of a Color Image** - US Patent (Application US 21676405, 2005 – Publication US20060050957 A1, March 2006) US Patent **US7528991B2**, May 2009;
- [P15] G. Messina, M. I. Guarnera, G. Barbera, S. Battiato, G. Gallo - **Raster to Vector Conversion of a Digital Image** - US Patent (Application US 11/271499, 2005 – Publication US 20060104529 A1, May 2006) US Patent **US7567720B2**, July 2009 - European Patent Pending (Priority: RM2004A000562);
- [P16] G. Messina, M. I. Guarnera, A. Costanzo, S. Battiato, G. Gallo, S. Nicotra – **Digital Image Processing Method** - US Patent (Application US 11/259937, 2005 – Publication US 2006/0104532 A1, May 2006) **US7689060**, March 2010 - European Patent Pending (Priority RM2004A000563 – 2004);
- [P17] A. Bruna, G. Gallo, S. Battiato, S. La Rosa – **Method for Compression of Image Data and Corresponding Apparatus and Computer-Program Product** - US Patent (Application US 11/295174, 2005 - Publication US 20060159356 A1, July 2006) **US7616825B2**, November 2009 - European Patent Pending (Priority. TO2004A000863);
- [P18] S. Battiato, M.G. Guanziroli, F. Rundo, M. Samperi – **A Process and System for Digital Colour Image Compression and Corresponding Computer-Program Product** – European Patent Pending (Priority. TO2007A000246, April 2007);
- [P19] A. Bruna, S. Battiato, G. Puglisi - **Method of Filtering a Video Sequence Image From Spurious Motion Effects** – US Patent (Application US 12/272591, 2008 – Publications US2010/0124379 A1 – May 2010) **US8150181B2** – April 2012.
- [P20] G. Spampinato, A.R. Bruna, S. Battiato, G. Puglisi - **Low Cost Roto-Translational Algorithm and Architecture for Digital Video Stabilization** - European Patent Pending (Priority VI2012A000087, April 2012);
- [P21] S. Battiato, G. Digiore, A. Ortis, F. Rundo - **Procedimenti e Sistemi per il Trattamento di Immagini Stereoscopiche, Prodotti Informatici e Supporto Relativi** - European Patent Pending (Priority TO2012A000647, July 2012) – US Patent application (US 2014/0029860 A1 – June 2014);
- [P22] N. I. Guarneri, A. Capra, S. Battiato, G. M. Farinella, F. Cristaldi - **Method and System For Multi-Touch Shape Recognition, Related Screen Apparatus and Computer Program Product** - European Patent Pending (Priority TO2012A000864, October 2012) - US Patent Application US20140098045A1 (2014);

National Conferences (with Proceedings e Referees)

- [NC1] S. Battiato, G. Di Blasi, G. Gallo, A. LoGiuoco, M. Madonia, S. Nicotra, F. Stanco – **Digital Image Analysis and Enhancement** – In Proceedings of GIRPR'04, *2nd Convegno del Gruppo Italiano Ricercatori in Pattern Recognition*, Perugia, September 2004;
- [NC2] S. Battiato, G. Di Blasi, G.M. Farinella, G. Gallo - **A Survey of Digital Mosaic Techniques** – In Proceedings of 4^o Conference *Eurographics Italian Chapter* – pp.129-135 - Catania, 22-24 February 2006;
- [NC3] S. Battiato, F. Stanco – **A New Descreening Technique in the Frequency Domain** - In Proceedings of 4^o Conference *Eurographics Italian Chapter* – pp.137-142 - Catania, 22-24 February 2006;
- [NC4] S. Battiato, F. Rundo, F. Stanco - **Color Palette Images Re-indexing by Self Organizing Motor Maps** - In Proceedings of 4^o Conference *Eurographics Italian Chapter* – pp.241-246 - Catania, 22-24 February 2006;

- [NC5] S. Battiato, G.M. Farinella, G. Puglisi – **SVG Vectorization by Statistical Region Merging** - In Proceedings of 4° Conference *Eurographics Italian Chapter* – pp.15-21 - Catania, 22-24 February 2006;
- [NC6] S. Battiato, F. Greco, S. Nicotra - **Compressed SVG Representation of Raster Images Vectorized by DDT Triangulation** – In Proceedings of 4° Conference *Eurographics Italian Chapter* – pp.233-239 - Catania, 22-24 February 2006;
- [NC7] S. Battiato, C. Bosco, G.M. Farinella, G. Impoco - **3D CT Segmentation for Clinical Evaluation of Knee Prosthesis Operations** - In Proceedings of 4° Conference *Eurographics Italian Chapter* – pp.263-266 - Catania, 22-24 February 2006;
- [NC8] S. Battiato, G. Di Blasi, G.M. Farinella, G. Gallo, G. Impoco – **Medical Imaging Applications: Three Case Studies** – In Proceedings of CISI'06 – *Conferenza Italiana sui Sistemi Intelligenti* – Ancona, September 2006;
- [NC9] S. Battiato, G. Puglisi, G. Impoco – **Vectorialization of Raster Colour Images** – In Proceedings of II Conferenza Nazionale del Gruppo del Colore - pp. 221-228 Milano, September 2006. Atti Pubblicati sulla *Collana Quaderni di Ottica e Fotonica* – Colore e Colorimetria: Contributi Multidisciplinari - vol. II - No.14 - Centro Editoriale Toscano, 2006;
- [NC10] S. Battiato, G. Puglisi - **Rendering Order Optimization for SVGStat Improvement** – In Proceedings of 5th Conference *Eurographics Italian Chapter 2007* – Trento, February 2007;
- [NC11] S. Battiato, G. Di Blasi, G. Gallo, S. Patti - **Ramses: a Visual Steganographic System** – In Proceedings of 5th Conference *Eurographics Italian Chapter 2007* – Trento, February 2007;
- [NC12] P.A. Bertacchini, E. Bilotta, P. Pantano, S. Battiato, M. Cronin, G. Di Blasi, A. Talarico, A. Tavernise - **Modelling and Animation of Theatrical Greek Masks in an Authoring System** - In Proceedings of 5th Conference *Eurographics Italian Chapter 2007* – Trento, February 2007;
- [NC13] S. Battiato, G. Bilotta, G. Impoco, G. Russo - **Simulazione Strutturale di un Sistema Osso-Protesi del Ginocchio** – In Proceedings of VII Biomaterial Days – Catania, July 2007;
- [NC14] S. Battiato, G. Di Blasi, G. Gallo, A. Milone – **Realizzazione di Mosaici Artificiali in Ambiente 3D** – In Proceedings of V *Convegno AIAR – Associazione Italiana di Archeometria* – Siracusa, February 2008;
- [NC15] G. Barone, S. Battiato, G. Gallo, P. Mazzoleni, G. Puglisi, F. Stanco - **Il Problema del Riconoscimento Automatico delle Caratteristiche Petrografiche in Sezione Sottile di Ceramiche di Interesse Archeologico** In Proceedings of VI *Convegno AIAR – Associazione Italiana di Archeometria* – Pavia, February 2010.
- [NC16] S. Battiato, G. Messina, L. Trupia - **An Improved Benchmarking Dataset for Forgery Detection Strategies** – In Proceedings of Minisymposium *Image and Video Forensics*, SIMAI 2010, Cagliari (Italy) – June 2010 (only Abstract);
- [NC17] S. Battiato, G. M. Farinella, G. C. Guarnera, G. Puglisi - **Advanced Analysis of Image Collections for Digital Investigation: Status and Perspectives** - In Proceedings of Minisymposium *Image and Video Forensics*, SIMAI 2010, Cagliari (Italy) – June 2010 (only Abstract);
- [NC18] S. Battiato, S. Bianco, G. Ciocca, F. Gasparini, G. Puglisi, S. Schettini - **Smart Photo Sticking for Intangible Cultural Heritage** - In Proceedings of Minisymposium *Image Analysis Methods for Cultural Heritage*, SIMAI 2010, Cagliari (Italy) – June 2010 (only Abstract);
- [NC19] S. Battiato, G. M. Farinella, O. Giudice, S. Cafiso, A. Di Graziano- **Vision Based Traffic Conflict Analysis** – In Proceedings of *Convegno Nazionale AEIT Innovazione e cultura scientifica e tecnica per lo sviluppo* – Palermo (Italy), October 2013;
- [NC20] G. M. Farinella, D. Allegra, M. Moltisanti, F. Stanco, S. Battiato - **Food Understanding from Digital Images** – In Proceedings of SIMFOOD - *Giornata di Studi MIMOS su La Simulazione nel settore Food & Beverage* – Parma (Italy)- Aprile 2015;

Invited talks

- “Algorithms and Techniques for Digital Image Processing” – Associazione Elettrotecnica ed Elettronica Italiana - December 2002 - Aula Magna - Engineering Faculty - Catania.
- “Adaptive Techniques for Image Enhancement: Expected Color Rendition and Data Fusion”, visiting Research c/o Queen Mary University of London - September 2004.
- “Natural Scene Enhancement by Adaptive Color Correction” November 2004, Dipartimento di Linguistica Università of Calabria (Cosenza - Italy).
- Teacher c/o Winter School on Computer Graphic (<http://vcg.isti.cnr.it/EGIT05/>), organized by 'ISTI-CNR of Pisa Italian Chapter, “SVG: A 2D Graphic Standard”.
- “Segmentazione di Immagini Mediche: casi di studio”, Workshop “*Medical and Industrial Imaging*” c/o Dipartimento di Matematica ed Informatica dell'Università di Catania – June 2008
- “Applicazioni dell'Image Processing in ambito investigativo”, Workshop “*Internet fra società, diritto e attività di indagine*” c/o Tribunale di Siracusa, Italy July 2008.
- “Microarray Image Analysis” c/o *International School of Functional Genomics* - Scicli (RG), Italy July 2008.
- *Invited Tutorial* c/o IV Conferenza Nazionale Gruppo del Colore Como, Italy - September 2008 on “Digital Mosaics: Status e Perspective”.
- “Unsupervised Adult Image Classification: Is it really possible?” Workshop “*Fight against online paedophilia – meeting of European experts*” Siracusa, Italy , December 2008.
- “Image Generation Pipeline on Mobile Devices: Status and Perspective” c/o Movidia Ltd - Dublin, January 2009.
- “Unsupervised Forgery Detection” c/o Interpol - Lyon, France – March 2009.
- “Image Forensics: Status e Perspective” c/o Cassa Nazionale Forense IISFA Italian Chapter - Rome – Italy, April 2009.
- “Mobile Image Forensics: Recovery and Analysis” c/o Università di Bologna - IISFA Forum 2009, May 2009.
- “Digital Reproduction of Ancient Mosaics: an Overview” - Facoltà di Conservazione dei Beni Culturali of Ravenna - March 2010;
- “Investigation by Images and Videos” c/o Università degli Studi di Milano - April 2010;
- “Digital Video Stabilization” c/o Dipartimento di Informatica Sistemistica e Telecomunicazioni dell'Università degli Studi di Milano Bicocca - April 2010;
- “Digital Investigations on Multimedia Datasets: Image Hashing and Face Recognition” - IISFA Forum 2010 Milano May 2010;
- Image Processing for Embedded Devices: two case studies” - The Hong Kong Polytechnic University, September 2010;
- “Image and Video Forensics: case studies - Cassa Nazionale Forense IISFA Italian Chapter - Rome – Italy, April 2011.
- *Scientific Course Image Processing for Single-Sensor Imaging Devices (SC1048) IS&T/SPIE Electronic Imaging 2012* - San Francisco, USA – January 2012;
- *Introduction to Image Forensics* – c/o UNIKORE, Enna (Italy)- January 2012;
- *Steganography and Stegoanalysis: some case studies* – Centro Studi di Informatica Giuridica - Reggio Calabria (June 2012);
- *Image and Video Forensics: Best Practices* – Digital Forensics Meeting , Udine (Italy) – November 2012;
- Ph.D. course @ Università di Udine (Italy) on *Image and Video Forensics* – November 2012;
- “*Vision Based Games and Controllers: An Overview*” – Global Game JAM – Catania (Italy) January 2013;
- *Scientific Course Image and Video Forensics: Recent Trends and Challenges (SC1130) IS&T/SPIE Electronic Imaging 2014* - San Francisco, USA – 2014;

- Invited Lecture on “*Image e Video Forensics: Recent Trends and Challenges*” Ph.d School GIRPR “Visione delle Macchine” - VISMAC 2014 – Ascea (SA) –2014.

Catania, Deember 2015

Prof. Sebastiano Battiato

A handwritten signature in black ink, appearing to read 'Sebastiano Battiato', written in a cursive style.