

Elisabetta Binaghi

Curriculum Vitae et Studiorum

(Last update: May 22, 2017)

Personal Information

Dipartimento di Scienze Teoriche e Applicate

Università degli Studi dell'Insubria

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Education

1981: Master in Physics (Summa cum Laude)- University of Milan, Italy.

Employment

2002 – Present: Associate Professor – Dipartimento di Scienze Teoriche ed Applicate, Università degli Studi dell'Insubria, Varese, Italy

1985 – 2002: Researcher at the National Research Council:

- From 1985 to 1993, she worked at the Institute of Cosmic Physics of the National Research Council of Milan and collaborated with the group of Image Analysis.
- In 1994 she joined the Institute for Multimedia Information Technology of National Research Council of Milan where she headed the Artificial Intelligence and the Soft Computing Laboratory.

2005 –present: Scientific Director of the Center of Research in Image Analysis and Medical Informatics (CRAIM)

2016-present: Member of the Scientific Committee of Center of Research in Bioinformatics

2000- 2013- Member of the Scientific Committee of Center of Research in “Informatica Interattiva”

Italian Habilitations (ANVUR)

Habilitation as Full Professor in Computer Science (01/B1) (29/1/2014-29/1/2020)

Research Interests

- Pattern Recognition and Image Processing
- Computational Intelligence, Neural Computing
- Biomedical Image Segmentation
- Computational Neuroimaging, fMRI, MRI data analysis
- Stereomatching
- Image Restoration
- Geospatial Knowledge Processing

Projects and Collaborations***Coordination of CRAIM Research Activities***

In the role of Scientific Director of the Center of Research in Image Analysis and Medical Informatics she pursues the main objective of promoting interdisciplinary researches at the intersection of computerscience and biomedical field.

She is continuously engaged in promoting exchange of ideas and collaborations between fellow researchers from the center. The continuous increase of Computer Science applications in the medical field creates the need for advanced Data Analysis, Image Processing and Pattern Recognition techniques. In many cases these techniques go beyond conventional approaches and are rooted in advanced computational models that still

require experimental consolidations. In order to convincingly prove the benefits of new techniques to medicals, it is necessary to integrate them in traditional clinical practices and to develop a reliable, intensive method of validation.

Current and Recent Projects

Data Mining for Brain Parcellation

In collaboration with

U.O. Fisica Sanitaria Ospedale di Circolo e Fondazione Macchi, Varese

Dipartimento di Biotecnologie e Scienze della Vita

U.O. Neuroradiologia and U.O. Neurochirurgia Ospedale di Circolo Fondazione Macchi, Varese.

Role: Scientific Responsible (2016-present)

Machine learning techniques for Big Data Analysis in Customer Service e Self-Service domain.

Funded by EUDATA srl

Role: Scientific responsible (January 2018-present)

An integrated fuzzy logic and Web based framework for active support in dental health

in collaboration with

Dipartimento di Scienze Teoriche e Applicate

Dipartimento di Medicina e Chirurgia

Role: Scientific Responsible (2016-present)

Quantitative evaluation of susceptibility effects caused by dental materials in head magnetic resonance imaging.

In collaboration with

U.O. Fisica Sanitaria Ospedale di Circolo e Fondazione Macchi, Varese

Dipartimento di Medicina e Chirurgia

Role: Scientific Responsible (2014-present)

MRI Glial Brain Tumor Segmentation

Design and development of fully automatic Low Grade Glioma and Meningioma segmentation in Volumetric MRI data

in collaboration with

Dipartimento di Biotecnologie e Scienze della Vita

U.O. Neuroradiologia and U.O. Neurochirurgia Ospedale di Circolo Fondazione Macchi, Varese.

Institute for Neurosciences of Montpellier (INM),

Dipartimento di Neuroscienze e Neuroriabilitazione, UOC NCH Ospedale Pediatrico Bambin Gesù, IRCCS, Roma

Role: Scientific Responsible (2011-2016)

Advanced technologies and education in Computational NeuroImaging for Clinical and Cognitive Domain

Technological Cluster approved by R.L. 5981 del 5-7-2012 Regione Lombardia,

Role: Principal Investigator. (2012-2013)

Quantitative Analysis of Statistic Parametric Map

Development of an fMRI Statistic Parametric Map (SPM) Evaluation Framework

Quantitative Analysis and Comparison of SPM: a support for clinical qualitative analysis

In collaboration with

UO Fisica Sanitaria Ospedale di Circolo e Fondazione Macchi, Varese

U.O. Neuroradiologia Ospedale di Circolo Fondazione Macchi, Varese

Role: Scientific Responsible (2010-2013)

Main Closed Projects

Soft Computing, Pattern Recognition and Image Processing for web mining and multimedia retrieval with applicatio to Web

Funded by 7Pixel s.r.l.

Role: Scientific Responsible (2008-2012)

Permafrost and small alpine Glaciers

PRIN 2008 Project N.2008723SYJ_002

Funded by Italian Ministry of University, Education and Research

Role: Participant

Activity: Multisource geospatial data analysis. (2008-2010)

3D Volume Reconstruction from Stereo Biomedical Images

In collaboration with

Dipartimento di Morfologia Umana, Università degli Studi dell'Insubria

Role: Scientific Responsible (2002-2008)

Neural Adaptive Models for Landslide Prediction in Pipeline Management

Funded by SNAM-ENI,

in collaboration with

Dipartimento di Ingegneria Strutturale Politecnico di Milano

Role: Scientific Responsible. (2000-2003)

Remote Sensing Data Analysis for electrical power COREINA surveillance

Funded by Centro Elettrotecnico Sperimentale Italiano (CESI-S.p.A.).

Role: Scientific Responsible. (2000-2001)

GBA2000 (Global Burnt Area Project 2000)- Definition of standards for the analysis of remote sensing imagery in monitoring burnt areas.

Funded by European Commission-Joint Research Center

Role: Participant (2000-2001)

Multisource Remote Sensing Data Analysis for archeological studies

Funded by Progetto Finalizzato del CNR: Beni Culturali 1999-2000

In collaboration with IREA-CNR, Sovraintendenza ai Beni Archeologici di Milano

Role: Participant (1999-2000)

FI.R.E.M.EN.: Knowledge-Based System for Fire Risk Evaluation in Mediterranean Environment

Funded by ECC Program Environment (contratto CEE EV5VCT94-0521- ITIM-CNR prime contractor)

Role: Participant (1994-1996)

Editorial Board

Guest Editor of Special Issues

- Binaghi E., Belward A., Brivio P.A., Lanzarone G.A., Tosi G., Geospatial Knowledge Processing for Natural Resource Management, International Journal of Remote Sensing: Vol.24, N.ro 20, 2003.
- Binaghi E., P.A. Brivio, A. Rampini, R. Showengerdt, of Non Conventional Pattern Analysis in Remote Sensing, Pattern Recognition Letters, Vol. 17, n.13, pp. 1323-1324, 1996.

Editor in Edited Books

- Binaghi E., Serpico B.S., Brivio P.A.; Geospatial Pattern Recognition, Transworld Research Network, 2001

- Binaghi E., P.A. Brivio, A. Rampini, Soft Computing in Remote Sensing Data Analysis, Series in Remote Sensing – Vol. 1, World Scientific, Singapore, 1995

Conference, Workshop Organisation

Chair/Co-Chair

- Workshop on “Interdisciplinary experiences on Computational Neuroimaging”, Aula Michelangelo, Ospedale Circolo Fondazione Macchi – Varese Italy, 22 Aprile 2013
- Workshop on Computational Models for Visual Objects and Knowledge in Biomedical Domain, University of Insubria, Varese, Italy. Four editions: 2005, 2006, 2009, 2010.
- International Conference on Geo-Spatial Knowledge Processing for Natural Resources Management, technically supported by IEEE Geoscience and Remote Sensing Society, Varese- Italy , June 2001
- International Workshop on Soft Computing in Remote Sensing Data Analysis- Milano 1995.
- First Workshop on Fuzzy Set Theory in Real Applications – Milano 1993.

Organisation of sessions

- "Functional and Structural MRI Brain Image Analysis and Processing"- ComImage 2012, Rome September 2102.
- Intelligent Methods and Uncertainty modelling in Remote Sensing and Geographic Information Processing, European Symposium on Intelligent Techniques (ELITE Symposium), Marzo 20,21, 1997

Program Committee Member

- VipImage- VI ECCOMAS Thematic Conference on Computational Vision and Medical Image Processing, October 18-20 October, Porto, Portugal 2017.
- ICIAP 2015, 18th edition of the biannual International Conference on Image Analysis and Processing, September 7-11 Genova, 2015
- VipImage- V ECCOMAS Thematic Conference on Computational Vision and Medical Image Processing, October 19-21 Tenerife Canary Islands, Spain 2015
- 4th CompIMAGE conference Sept. 3-5, in Pittsburgh, USA 2014.
- The Eighth International Conference on Signal Processing, Pattern Recognition, and Applications SPPRA 2011 Innsbruck, Austria, 2011
- Pattern Recognition in Remote Sensing (PRRS 2010) Workshop, Istanbul, Turkey 2010
- Image and Signal Processing for Remote Sensing, SPIE Symposium on Remote Sensing, September 2009
- International Conference on Signal Processing, Pattern Recognition and Applications (SPPRA 2009), Innsbruck, Austria 2009
- Image and Signal Processing for Remote Sensing, SPIE Symposium on Remote Sensing, Londra, September 2008
- IEEE International Geoscience and Remote Sensing Symposium, July 2008
- 5th Workshop on Pattern Recognition in Remote Sensing (PRRS 2008) as part of the IAPR International Conference on Pattern Recognition (ICPR 2008) at Tampa, Florida on December 7, 2008
- Image and Signal Processing for Remote Sensing, SPIE Symposium on Remote Sensing, Florence Italy, 2007
- Image and Signal Processing for Remote Sensing, SPIE Symposium on Remote Sensing, Stockholm , September 2006
- 4th Pattern Recognition in Remote Sensing Workshop PRRS'06 Hong Kong, August, 2006
- Image and Signal Processing for Remote Sensing, SPIE Symposium on Remote Sensing, Bruges, September 2005
- International IAPR Workshop on Pattern Recognition for Remote Sensing, Cambridge, August 27, 2004

- Image and Signal Processing for Remote Sensing, SPIE Symposium on Remote Sensing, Gran Canaria, September 2004
- Image and Signal Processing for Remote Sensing, SPIE Symposium on Remote Sensing, Barcellona, September 2003.
- Image and Signal Processing for Remote Sensing, SPIE Symposium on Remote Sensing, Creta, September 2002
- 2nd International Workshop on Pattern Recognition for Remote Sensing, Canada, August 16, 2002
- Image and Signal Processing for Remote Sensing, SPIE Symposium on Remote Sensing, Tolosa September 2001
- International Workshop on Pattern Recognition for Remote Sensing, Andorra, Spagna 2000
- Image and Signal Processing for Remote Sensing, Europto Symposium, Barcellona, Spagna, 2000
- Image and Signal Processing for Remote Sensing, Europto Symposium, Firenze 1999
- Image and Signal Processing for Remote Sensing, Europto Symposium, Barcellona, Spagna, 1998
- AA'91 (Giornate di lavoro sull'Apprendimento Automatico) – Bari 1991
- IEEE Tools for Artificial Intelligence (TAI 90), VA, USA, 1990

Conference Speaker

- IEEE International Conference on Fuzzy Systems, Naples, July 9-12, 2017- F[2]
- International Conference on Image Analysis and Processing, Genova 7-11 September 2015 - F[6]
- International Conference on Neural Computation Theory and Applications, Rome, October 2014- F[7]
- 1st International Workshop on Visual Interfaces for Ground Truth Collection in Computer Vision Applications VIGTA '12, Capri, Italy, May 2012. F[10]
- Image Analysis and Processing - ICIAP 2009 September Vietri sul Mare (SA) 2009- F [24]
- International Machine Vision and Image Processing Conf., Maynooth Ireland, September 2007. F[32]
- SPIE Symposium on 13th Image and Signal Processing for Remote Sensing XII Stockholm Sweden, September 2006- F[36].
- Image and Signal Processing for Remote Sensing, Europto Symposium, SPIE vol. 3871, pp.195-204, Firenze Italy, September 1999- F[56].
- Italian Workshop on Fuzzy Logic, Genova, June 1999 – F[57].
- Image and Signal Processing for Remote Sensing, Europto Symposium, *SPIE* Barcelona (Spain), September 1998- F[59].
- Image and Signal Processing for Remote Sensing, Europto Symposium, *SPIE* - Barcelona (Spain), September 1998 F[60].
- International Workshop on Fuzzy Logic - Wilf'97, Bari 19-20 March (**invited**) 1997- F[62]
- 7th World Congress of International Fuzzy Systems Association, pp.297-302, Prague (Czech Republic), July 1997- F[65].
- European Symp. on Intelligent Techniques, Bari (Italy), March 1997- F[67].
- Sixth Int. Conference on Information Processing and Management of Uncertainty, IPMU'96, Granada, Spain, July 1996- F[69].
- International Society for Photogrammetry and Remote Sensing conference ISPRS '96, WG II/2, Milan (Italy), March 1996- F[70].
- 5th International Conference IPMU' 94, Paris (France), pp. 892-97, July 1994 - F[75].
- IEEE IMACS Symposium on Signal Processing, Robotics and Neural Networks, Lille (France) (**invited**) 1994- F[76].
- Int. Conference on Image Processing: Theory and Applications Sanremo (Italy), June 1993- F[78]
- 1st. Workshop on Fuzzy Set Theory in Real Applications, Milan (Italy) May 1993- F[83]
- 6th Int. Conference on Image Analysis and Processing, Como 4-6 Sept 1991- F[88]
- 2nd International Conference of Fuzzy Logic and Neural Networks, Iizuka (Japan) 1992, (**invited**)- F[89]

- 12th International Conference, IPMI '91 Wye, July 1991- F[90].
- 3rd International Conference on Information Processing and Management of Uncertainty in Knowledge-Based Systems IPMU '90, Paris (France), July 1990, F[92]
- Int. Conference on Image Analysis and Processing, Progress in Image Analysis and Processing, Positano (Italy) September 1989- F [93]
- IEEE International Conference on Image Processing, Singapore, 1989- F[95]
- IEEE International Workshop on Tools for AI, Fairfax (WA), 1989- F[96]
- Education and Application of Computer Technology, Bari (Italy), 1988 –F[99]

Collaboration with International journals in the role of reviewer:

Continued service as reviewer for all the main International Journals and Conferences of the field, including, but not limited to

- Computers in Biology and Medicine
- Computer Methods in Biomechanics and Biomedical Engineering: Imaging& Visualization
- IEEE Transaction on Image Processing
- Pattern Analysis and Applications
- IEEE Transaction on Geoscience and Remote Sensing.
- IEEE Transaction on Fuzzy Systems
- IEEE Transaction on Neural Network
- Artificial Intellicence (North Holland)
- Pattern Recognition Letters
- Canadian Journal of Remote Sensing
- Photogrammetry Engineering and Remote Sensing
- Optical Engeneering

Teaching

Current Courses at University of Insubria

Undergraduate courses: bachelor - Computer Science

(It.: Laurea Triennale in Informatica)

Elaborazione delle Immagini (Digital Image Processing) - 6 cfu

Postgraduate courses: master degree - Computer Science

(It.: Laurea Magistrale / Specialistica in Informatica)

Sistemi Intelligenti- (Intelligent Systems) -9 cfu

Previously held courses

Undergraduate courses: bachelor - Computer Science

(It.: Laurea Triennale in Informatica)

“Elaborazione delle Immagini” (Digital Image Processing)

6 CFU (x15 years)

Università degli Studi dellInsubria – 2002/2003 - 2016/2017

Postgraduate courses: master degree - Computer Science

(It.: Laurea Magistrale / Specialistica in Informatica)

“Sistemi Intelligenti 1” (Intelligent Systems I)

4 CFU (x 4 years); 6 CFU (x 4 years)

Università degli Studi dellInsubria – 2002/2003 - 2009/2010

“Sistemi Intelligenti II” (Intelligent Systems II) –
6 CFU (x 1 year); 4 cfu (x 4 years)
Università degli Studi dell’Insubria – 2005/2006 - 2009/2010

“Sistemi Intelligenti” (Intelligent Systems)
9 CFU (x 7 years)
Università degli Studi dell’Insubria – 2010/2011 - 2016/2017

“Metodi Avanzati per l’Analisi e l’Interpretazione di Dati Biomedici” (Advanced Methods in Biomedical Data Analysis and Interpretation)
6 CFU
Università degli Studi dell’Insubria – 2012/2013

“Sistemi Multimediali 1” (Multimedia Systems I)
3 CFU (x 1 years)
Università degli Studi dell’Insubria – 2002/2003

***Postgraduate courses: master degree – Biological Science
(It.: Laurea Magistrale / Specialistica in Scienze Biologiche)***

“Informatica” (Computer Science)
1 CFU (x 5 years)
Università degli Studi dell’Insubria – 2005/2006 al 2009/2010

***Undergraduate courses: bachelor – Communication Science
(It.: Laurea Triennale Scienze della Comunicazione)***

“Sistemi Multimediali” (Multimedia Systems)
6 CFU (x 2 years)
Università degli Studi dell’Insubria – 2002/2003 -2004/2005

Course in Odontology- (Laurea a ciclo unico in Odontoiatria- 5 years))

“Informatica e Sistemi di Elaborazione delle Informazioni” (Computer Science and Information Systems) –
4 CFU (x 3 years)
Università degli Studi dell’Insubria 2002/2003-2004/2005

Teaching in Master Courses

- Master di II livello in Digital Dentistry, third edition, Università degli Studi dell’Insubria, Lessons on “Cone beam computerized tomography (CBCT): Image restoration techniques and image quality assessment”, (2 hours), 2016
- Master di II livello in Digital Dentistry, second edition, Università degli Studi dell’Insubria, Lesson on “Analysis of susceptibility effects caused by dental materials in head magnetic resonance imaging”., (2 hours), 2015
- Master di II livello in Digital Dentistry, first edition, Università degli Studi dell’Insubria, Lesson on “Methods for biomedical image recognition”, (2 hours), 2014
- Master WEB & Business, Università degli Studi dell’Insubria- Lesson on “Sistemi Multimediali” (10 hours), 2004
- Master Web e Business, Università degli Studi dell’Insubria, Lesson on “Sistemi Multimediali”, (6 hours), 2002

- Master Didattica e la comunicazione multimediale del patrimonio culturale, Politecnico di Milano, lesson on “*I Musei Virtuali*”, (4 hours), 2002
- Master Progettazione di servizi culturali tecnologicamente avanzati, Politecnico di Milano Lesson on “*Mostre e musei virtuali*”, (4 hours), 2003
- Master Gestione Integrata di Ambiente, Salute e Sicurezza in ambito Industriale, National Research Council, lesson on “*Telerilevamento nel rischio ambientale*”, (4 hours), 2003

Teaching in PhD courses:

Methods in Biomedical Image Processing and Analysis, PhD Program in Computer Science- Università degli Studi dell’Insubria, 05/2011

PhD Programs

Member of the Board of the PhD Program in Informatica e Matematica del Calcolo - Università degli Studi dell’Insubria

Supervision of Graduated PhD Students

Med Jebini, Intelligent techniques for Stereomatching in progress (Advisor)

Samuele Martinelli, fMRI Data Analysis, in progress (Advisor)

Gloria Gonella, Biomedical Image Segmentation, in progress (Advisor)

Alberto Arturo Vergani, Computational Neuroimaging, in progress (Advisor)

Valentina Padoa, MRI and fMRI Image Analysis for the Glial Brain Tumor Treatment, 2013 (Advisor)

Marco Vanetti, Visual Features Extraction for Object Detection and Segmentation, 2013 (Co-advisor)

Moreno Carullo, Automated Semantic Content Extraction from Web Pages, 2011 (Advisor)

Reviewer of PhD candidates

Reviewer of the PhD thesis and activity - candidate Roberta Ferretti, PhD in Science and Technology for Electronic and Telecommunication Engineering- Università di Genova, 12/2016.

Member of the Commission for Phd examination

A.A. 2008/9; 2011/12; 2015/16; 2017/18

Member of the Commission for 1 position RTDA INF/01 at DISCO Università di Milano Bicocca

A.A. 2017/2018

Scientific Responsible of the research grant:

- Sviluppo di tecniche di Web Content Mining e loro applicazione nel dominio delle reti sociali 2009/2010
- Sviluppo di procedure di analisi e riconoscimento per l'Imaging Biomedicale 2009/2012
- Definizione e Sviluppo di Modelli di Acquisizione e Gestione dell' Informazione Multimediale per Sistemi di Supporto alle Decisioni in Ambienti Distribuiti 2003/2004

Supervision of Theses

Supervisor of about 50 Italian Laurea theses (Computer Science Course), both bachelor and master degrees, at the Universities of Milano (1985-2002) and University of Insubria (from 2002 to present)

Other activities at Università degli Studi dell'Insubria

- Representative of the University of Insubria in Working Table “ICT for Health” of the Cluster Lombardo “Scienze della Vita”
- Tutor -Laurea Triennale in Informatica

A.A. 2014/2015-present

Representative of the Director of the Department for Orientation

A.A. 2012/13- present

Responsible of the Commission for Orientation - Laurea in Informatica

Elisabetta Binaghi - Publications

A- Refereed Papers in Journals

- [1] E. Binaghi, A. Vergani, A. Montalbetti, R. Minotto, S. Strocchi, V. Pedoia, S. Balbi. Computation and Management of Weighted Activation Vectors in Support to fMRI Analysis of Clinical Subjects. *Computer Methods in Biomechanics and Biomedical Engineering: Imaging and Visualisation*, 2018. Accepted with major revisions.
- [2] E. Binaghi, V. Pedoia, S. Balbi. Meningioma and Peritumoral Edema Segmentation of Preoperative MRI Brain Scans. *Computer Methods in Biomechanics and Biomedical Engineering: Imaging and Visualisation*, DOI:10.1080/21681163.2016.1250108, 2016.
- [3] E. Binaghi, V. Pedoia, S. Balbi. Collection and fuzzy estimation of truth labels in glial tumour segmentation studies. *Computer Methods in Biomechanics and Biomedical Engineering: Imaging and Visualisation*,. 4 (3-4), pp. 214-228, 2016.
- [4] M. Vanetti, E. Binaghi, E. Ferrari, B. Carminati, M. Carullo. A System to Filter Unwanted Messages from OSN User Walls. *IEEE Trans. On Knowledge and Data Engineering*, 25(2):285-297, 2013.
- [5] E. Binaghi, V. Pedoia, A. Guidali, M. Guglielmin. Snow cover thickness estimation using radial basis function networks. *The Cryosphere*, 7(3):841-854, 2013.
- [6] V. Pedoia, S. Strocchi, V. Colli, E. Binaghi, L. Conte. Functional Magnetic Resonance Imaging: comparison between activation maps and computation pipelines in a clinical context. *Magnetic Resonance Imaging*, 31: 555-566, 2013.
- [7] V. Pedoia, E. Binaghi. Automatic MRI 2D Brain Segmentation using Graph Searching Technique. *International Journal for Numerical Methods in Biomedical Engineering*, 29 (9):887-904, 2012.
- [8] M. Carullo, E. Binaghi, I. Gallo, An online document clustering technique for short web contents. *Pattern Recognition Letters*, 30(10):870-876, 2009.
- [9] I. Gallo, E. Binaghi, M. Raspanti. Semi-blind image restoration using a local neural approach. *Neurocomputing*, 73:389-396, 2009.
- [10] I. Gallo, E. Binaghi, M. Raspanti. Neural Disparity Computation for Dense Two-Frame Stereo Correspondence. *Pattern Recognition Letters*, 29:673-687, 2008.
- [11] E. Binaghi, I. Gallo, C. Ghiselli, L. Levrini, K. Biondi. An integrated fuzzy logic and web-based framework for active protocol support. *International Journal of Medical Informatics*, 77(4):256-271, 2008.
- [12] Manelli, S. Sangiorgi., E. Binaghi, M. Raspanti. 3D analysis of SEM images of corrosion casting using adaptive stereo matching. *Microscopy Research and Technique*, 70:350-354, 2007.

- [13] Macchi, C. Mangano, M. Inversini, A. Norcini, E. Binaghi. Scaffold individualizzati (custom made) nella rigenerazione ossea dei mascellari. *Implantologia Orale*, 4:7-15, 2006.
- [14] Boschetti M., I. Gallo, P. A. Brivio, E. Binaghi, Spectral/spatial data fusion by neural network techniques to retrieve vegetation understory information. *Rivista Italiana di Telerilevamento*, n. 33/34, 47-59. ISSN: 1129-8596, 2005.
- [15] M. Raspanti, E. Binaghi, I. Gallo, A. Manelli. A vision-based, 3D reconstruction technique for scanning electron microscopy: Direct comparison with Atomic Force Microscopy. *Microscopy Research and Technique*, 67:1-7, 2005.
- [16] E. Binaghi, M. Boschetti, P.A. Brivio, I. Gallo, F. Pergalani, A. Rampini. Prediction of Displacements in Unstable Areas Using a Neural Model. *Natural Hazard*, 32(1):135-154, 2004.
- [17] Binaghi E., Gallo I., Marino G, Raspanti M., Neural adaptive stereo matching. *Pattern Recognition Letters*, vol. 25, p. 1743-1758, 2004.
- [18] K. Tansey, J. Gregoire, E. Binaghi, L. Boschetti, P. Brivio, D. Ershov, S. Flasse, R. Fraser, D. Graetz, M. Maggi, P. Peduzzi, J. Pereira, J. Silva, A. Sousa, D. Stroppiana. A Global Inventory of Burned Areas at 1 Km Resolution for the Year 2000 Derived from Spot Vegetation Data. *Climate Change*, 67:345-377, 2004.
- [19] K. Tansey, J. Gregoire, D. Stroppiana, A. Sousa, J. Silva, J. Pereira, L. Boschetti, M. Maggi, P. Brivio, R. Fraser, S. Flasse, D. Ershov, E. Binaghi, D. Graetz, P. Peduzzi. Vegetation burning in the year 2000: Global burned area estimates from SPOT VEGETATION data. *Journal of Geophysical Research Atmospheres*. *Journal of Geophysical Research Atmospheres*, 109: D14S03-D14S03, 2004.
- [20] E. Binaghi, I. Gallo, M. Pepe, A Cognitive Pyramid for Contextual Classification of Remote Sensing Images, *IEEE Trans. On Geoscience and Remote Sensing*, 41:12, 2906-2922, 2003.
- [21] E. Binaghi, I. Gallo, M. Pepe. A neural adaptive model for feature extraction and recognition in high resolution remote sensing imagery. *International Journal of Remote Sensing*, 24:3947-3959, 2003.
- [22] A. Belward; E. Binaghi; P.A. Brivio; G.A. Lanzarone, G. Tosi. Preface to the Special Issue on GeoSpatial Knowledge Processing for Natural Resource Management. *International Journal of Remote Sensing*, 24:3885-3886, 2003.
- [23] P.A. Brivio, M. Maggi, E. Binaghi, I. Gallo. Mapping burned surfaces in sub-Saharan Africa based on multi-temporal neural classification. *International Journal of Remote Sensing*, 24(20): 4003-4018, 2003.
- [24] A. Bassini, S. Musazzi, U. Perini, E. Binaghi, I. Gallo, M. Pepe, P.A. Brivio, Telerilevamento delle linee di trasmissione. AEI - Rivista Associazione Elettrotecnica ed Elettronica Italiana , n. 90, 42-48. ISSN: 0013-6132003

- [25] A. Baraldi, E. Binaghi, P. Blonda, P.A. Brivio, A. Rampini. Comparison of the Multi-layer Perceptron with Neuro-Fuzzy Techniques in the Estimation of Cover Class Mixture in Remotely Sensed Data, *IEEE Trans. on Geoscience and Remote Sensing*, 39 (5):994-1005, 2001.
- [26] E. Binaghi, I. Gallo, P. Madella. A Neural Model for Fuzzy Dempster-Shafer Classifiers, *Int. Journal of Approximate Reasoning*, 25:89-121, 2000.
- [27] E. Binaghi, P. Madella. Fuzzy Dempster-Shafer Reasoning for Rule-Based Classifiers. *Int. Journal of Intelligent Systems*, 14:559-583, 1999.
- [28] E. Binaghi, R. Rabagliati, A. Rampini. Glacial Retreat in the 1980s in the Breonie, Aurine and Pusteresi Groups (Eastern Alps, Italy) in Landsat TM images. *Journal of Hydrology*, 44:279-295, 1999.
- [29] E. Binaghi, P.A. Brivio, P. Ghezzi, A. Rampini, E. Zilioli. Investigating the Behaviour of Neural and Fuzzy-Statistical Classifiers in Sub-Pixel Land Cover Estimation. *Canadian Journal of Remote Sensing*, 25(2): 171-188, 1999.
- [30] E. Binaghi, P.A. Brivio, P. Ghezzi, A. Rampini. A Fuzzy Set-Based Accuracy Assessment of Soft Classifications. *Pattern Recognition Letters*, 20:935-948, 1999.
- [31] E. Binaghi, P.A. Brivio, A. Rampini, P. Ghezzi, M. Vicenzi. Classificazione dei pixel misti mediante un modello neuro-fuzzy. *Rivista Italiana di telerilevamento*, n.16, 41-50, ISSN: 1129-8596, 1999.
- [32] E. Binaghi; L. Luzi; P. Madella; F. Pergalani; A. Rampini Slope Instability Zonation: a Comparison Between Certainty Factor and Fuzzy Dempster-Shafer Approaches. *Natural Hazard*, 17: 77-97, 1998.
- [33] E. Binaghi, P. Madella, M.G. Montesano, A. Rampini. Fuzzy contextual classification of multisource remote sensing images. *IEEE Trans. On Geosci and Remote Sensing*, 35:326-340, 1997.
- [34] E. Binaghi, P.A. Brivio, A. Rampini, R. Showengerdt, Editorial of the Special Issue Non conventional Pattern Analysis in Remote Sensing, *Pattern Recognition Letters*, 17(13):1323-1324, 1996.
- [35] E., Binaghi, P.A. Brivio, P. Ghezzi, A. Rampini, E. Zilioli. A hybrid approach to fuzzy land cover mapping, *Pattern Recognition Letter*, 17(13): 1399-1410, 1996.
- [36] E. Binaghi, I. Gagliardi, R. Schettini. Image retrieval using fuzzy evaluation of color similarity. *Int. Journal of Pattern Recognition and Artificial Intelligence*, 8(4):945-968, 1994.
- [37] E. Binaghi, A. Rampini. Fuzzy Decision-Making in the Classification of Multisource Remote Sensing Data. *Optical Engeneering*, 32:1193-1204, 1993.

- [38] E. Binaghi;O. D. Giorgi;G. Maggi;T. Motta;A. Rampini. Computer-Assisted Diagnosis of Postmenopausal Osteoporosis Using a Fuzzy Expert System Shell. *Computer and Biomedical Research*, 26:498-516, 1993.
- [39] E. Binaghi, A. Della Ventura, A. Rampini, R. Schettini. Fuzzy reasoning approach to similarity evaluation in image analysis, *International Journal of Intelligent Systems*, 8(7):749-69, 1993.
- [40] E. Binaghi. Fuzzy logic inference model for a rule-based system in medical diagnosis. *Int. Journal of Expert Systems*, 7:134-141. 1990.
- [41] E. Binaghi; G. Sechi; R. Vaccaro; L. Verdoscia. HCRC-Parallel computer: A massively parallel combined architecture supercomputer. *Microprocessing and Micoprogramming*, 25:287-292, 1989.
- [42] E. Binaghi;L. Lisca;A. Proserpio;G. R. Sechi. An abstract description generator for the reliability analysis in the design of real time systems. *Microprocessing and Micoprogramming*, 23:157-165, 1988.

B- Editor of special issues of refereed journal

- [1] E. Binaghi, A. Belward, P.A. Brivio, G.A. Lanzarone, G.Tosi, *Geospatial Knowledge Processing for Natural Resource Management, International Journal of Remote Sensing*, 24(20)20, 2003.
- [2] E. Binaghi, P.A. Brivio, A. Rampini, R. Showengerdt, *Non conventional Pattern Analysis in Remote Sensing, Pattern Recognition Letters*, 17(13):1323-1324, 1996.

C- Editor in Edited Books and Proceedings

- [1] E. Binaghi E; G.A. Lanzarone , M. Raspanti. Elaborazione di oggetti visuali in ambito biomedico. Varese: Insubria University Press, 2008.
- [2] E. Binaghi, B.S. Serpico, P.A.Brivio. Geospatial Pattern Recognition, Transworld Research Network, Trivandrum (India):Research Signpost, ISBN 81-7736-132-5, 2001
- [3] A. Belward, E. Binaghi, P.A. Brivio, Lanzarone, G. Tosi, Proceedings of Geo-Spatial Knowledge Processing for Natural Resources Management technically supported by IEEE Geoscience and Remote Sensing Society, S.P.I. 01.81 European Communities 2001, pp. 398.
- [4] E. Binaghi, P.A. Brivio, A. Rampini (Eds.), *Soft Computing in Remote Sensing Data Analysis*, Series in Remote Sensing – Vol. 1, Singapore: World Scientific,1995. ISBN 981-02-2757-4.

D- Publications in Edited Books

- [1] E. Binaghi, V. Padoia, D. Lattanzi, E. Monti, S. Balbi, R. Minotto. On the evaluation of automated MRI Brain Segmentations: technical and conceptual tools. In J. M. R.S. Tavares, R.M. Natal Jorge editors, *Developments in Medical Image Processing and Computational Vision – Lecture Notes in Computational Vision and Biomechanics*, Volume 19, pp.5-24, Springer, 2014.

- [2] E. Monti, V. Pedoia, E. Binaghi, S. Balbi. Study of the Prognostic Relevance of Longitudinal Brain Atrophy in Post-traumatic Diffuse Axonal Injury Using Graph-Based MRI Segmentation Techniques. In P. Di Giamberardino, D. Iacoviello, R. M. Natal Jorge, J.M. R.S. Tavares editors, Computational Modeling of Objects Presented in Images, Lecture Notes in Computational Vision and Biomechanics, volume 15, pp.245-268, Springer, 2014.
- [3] A. Zamberletti, I. Gallo, M. Carullo, E. Binaghi. Decoding 1-D barcode from degraded images using a neural network. In P. Richard, J. Braz editors, Computer Vision, Imaging and Computer Graphics. Theory and Applications- Revised Selected Papers of VISIGRAPP 2010, ISBN:9783642253812, CCIS series, vol. 229, pp.45-55, Springer, 2011.
- [4] E. Binaghi, A. Bielli, I. Gallo, A. Guidali, M. Raspanti, G.Salvini. Metodi neurali adattivi per il restauro di immagini biomediche. In E. Binaghi, G.A. Lanzarone, M. Raspanti editors, Elaborazione di oggetti visuali in ambito biomedico, Insubria University Press, pp.7-24, 2008.
- [5] M. Raspanti M; E. Binaghi, I. Gallo, C. Fornasier. Ricostruzione 3D vision-based di immagini acquisite da microscopio elettronico a scansione. pp.99-115. In E. Binaghi, G.A. Lanzarone, M. Raspanti editors, Elaborazione di oggetti visuali in ambito biomedico, Insubria University Press, pp.7-24, 2008.
- [6] I.Gallo, E. Binaghi. Dense Stereo Matching with Growing Aggregation and Neural Learning. In J. Braz; A. Ranchordas; H. Arajo and J. Jorge editors, Advances in Computer Graphics and Computer Vision, volume 4, pp.343-353, Springer, 2007.
- [7] G.A. Lanzarone, E. Binaghi, C. Chiselli, G. Della Misericordia. Le funzioni e i metodi informatici. In Domus Naturae: arte e scienza a Palazzo Arese Borromeo di Cesano Maderno, pp.51-62, 2006
- [8] E. Binaghi, I. Gallo, M. Pepe. Application of Multiresolution Remote Sensing Image Analysis and Neural Techniques to Power Lines Surveillance. In C.H. CHEN editor, Frontiers of Remote Sensing Information Processing, pp.383-402, World Scientific, 2003.
- [9] A. Bassini, S. Musazzi, U. Perini, E. Binaghi, I. Gallo, M. Pepe, P.A. Brivio, Telerilevamento delle linee di trasmissione. AEI - Rivista Associazione Elettrotecnica ed Elettronica Italiana , n. 90, 42-48. ISSN: 0013-613, 2003.
- [10] P.A. Brivio; E. Binaghi; I. Gallo; M. Maggi. Contextual Multitemporal Classification of Burned Areas in Coarse Resolution Imagery. In E. Binaghi, S. B. Serpico, P.A. Brivio editors, Geospatial Pattern Recognition , pp.189-202, Transworld Research Network, 2002.
- [11] E. Binaghi, I. Gallo. G.A. Lanzarone, M. Pepe. Remote Sensing Object Recognition by Cognitive Pyramids, In E. Binaghi, S. B. Serpico, P.A. Brivio editors, Geospatial Pattern Recognition, pp.87 103, Transworld Research Network, 2002.
- [12] E. Binaghi, P.A. Brivio, I. Gallo, M. Pepe, A. Rampini. Soft Computing Techniques for High Accuracy Classification of Remote Sensing Images.. In B. Chandrasekaran; M.D. Levine; C.H. Chen editors, Recent Research Developments in Pattern Recognition, Transworld Research Network, vol I, pp.89-112, 2000.

- [13] E. Binaghi, I. Gallo, P. Madella, A. Rampini. Approximate Reasoning and Multistrategy Learning for Multisource Remote Sensing Data Interpretation, in C.H. CHEN editor, Information Processing for Remote Sensing, pp.397-429, World Scientific, 1999.
- [14] R. Serandrei Barbero, E. Binaghi, C. Galli, R. Rabagliati, A. Rampini. Le Vedrette di Ries (Alpi Pusteresi) nell'Immagine Landsat TM del 24 Settembre 1991. In Studi Geografici e Geologici in Onore di Severino Belloni pp.569-580, Brigati Editore, 1999.
- [15] E. Binaghi; I. Cerrani, M.G. Montesano, A. Rampini. A hybrid fuzzy expert system shell for automated medical diagnosis. In C.H. Chen editor, Fuzzy logic and neural network handbook, pp.25.1-25.17, McGraw-Hill, 1996.
- [16] E. Binaghi, M.L. Cirila, A. Rampini, A fuzzy Logic Based System for the Quantification of Visual Inspection in Clinical Assessment (*extended version*). In B. B. Bouchon Meunier, R. Yager, L.A. Zadeh Fuzzy Logic and Soft Computing, volume 4, pp.379-385, World Scientific, 1995.
- [17] E. Binaghi, Fuzzy-Logic Based Tools for the Acquisition and Representation of Knowledge in Biomedical Applications. In S.G.Tzafestas, A. N.Venetsanopoulos editors, Fuzzy Reasoning in Information, Decision and Control Systems, Springer Netherlands, pp.529-551, 1994.
- [18] E. Binaghi, A. Della Ventura, A. Rampini, R. Schettini, A fuzzy knowledge-based system for biomedical image interpretation (*extended version*), In L. Zadeh, R. Yager and B. Bouchon editors, Uncertainty in Knowledge Bases, Lecture Notes in Computer Science Volume 521, pp. 488-497, Springer-Verlag, 1991.

E- Refereed Abstracts in Journals

- [1] E. Monti, S. Balbi, V. Pedoia, E. Binaghi, R. Minotto, M. Mauri, S. Sangiorgi, A. De Benedictis, Prognostic relevance of longitudinal brain atrophy estimation in post-traumatic diffuse axonal injury. Journal of Neurotrauma, vol. 31 (5): A66-A66, 2014
- [2] E. Binaghi; K. Biondi; M. Bosco; C. Ghiselli; L. Levrini. Confronto tra generazione automatica e clinica degli RDC. Doctor OS, 2:260-260, 2005.
- [3] M. Raspanti; E. Binaghi; I. Gallo; D. Martini; C. Dell'Orbo. Learning to fly: exploring the third dimension of SEM micrographs. Italian Journal of Anatomy and Embriology, 109:168-168, 2004.

F-Publications in Refereed Conference Proceedings

- [1] A. Vergani, S. Martinelli, E. Binaghi, Clustering functional MRI Patterns with Fuzzy and Competitive Algorithms, In Proceedings of CompImage 2018, 2-5 July 2018, Cracow, Poland, Submitted.
- [2] A. Vergani, E. Binaghi, S. Martinelli, S. Strocchi, Resting State fMRI Functional Connectivity Analysis using Soft Competitive Learning Algorithms, in Proceedings of 15th International Symposium on Computer Methods in Biomechanics and Biomedical Engineering and the 3rd Conference on Imaging and Visualization (CMBBE2018), Lisboa, Portugal, March 26-29 2018. In Press.
- [3] A. Vergani, E. Binaghi, A Soft Davies-Bouldin Separation Measure, Proceedings of IEEE International Conference on Fuzzy Systems, Rio de Janeiro, Brazil, 8-13 2018. Accepted.

- [4] A. Vergani, E. Binaghi, S. Martinelli. Cluster Analysis of Functional Neuroimages using Data Reduction and Competitive Learning Algorithms, Proceedings of 6th Eccomas Thematic Conference on Computational Vision and Medical Image Processing (VipIMAGE 2017), (Tavares, Joao Manuel R. S., Natal Jorge, R.M. eds.), Lecture Notes in Computational Vision and Biomechanics 27, pp.62-71, Springer International Publishing, Porto (Portugal), October 18-20, 2017. DOI: 10.1007/978-3-319-68195-5, ISBN: 978-3-319-68194-8
- [5] E. Binaghi, A. Vergani, V. Pedoia. Accuracy Evaluation of Soft Classifiers using Interval Type-2 Fuzzy Sets Framework, Proceedings of IEEE International Conference on Fuzzy Systems, Naples, July 9-12, 2017, pp. 1-6, doi: 10.1109/FUZZ-IEEE.2017.8015427. URL: <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=8015427&isnumber=8015374>
- [6] S. Strocchi, M. Ghielmi, F. Basilico, A. Macchi, R. Novario, R. Ferretti, E. Binaghi, Quantitative Evaluation of Susceptibility Effects caused by Dental Materials in Head Magnetic Resonance Imaging, Proceedings of SPIE Medical Imaging 2016: Physics of Medical Imaging, SPIE 978357, San Diego (CA), March 27, 2016. doi:10.1117/12.2206083.
- [7] S. Strocchi, E. Binaghi, R. Novario, M. Ghielmi, F. Basilico. Quantitative evaluation of susceptibility effects caused by dental materials in head magnetic resonance imaging. Physica Medica, Volume 32, Supplement 1, February 2016, Page 133. doi:10.1016/j.ejmp.2016.01.460
- [8] E. Binaghi, P. Melchiorre, L. Romitelli, S. Balbi, D. Lattanzi. Automated peritumoral edema segmentation in preoperative brain MRI scans. Proceedings of the 5th Eccomas Thematic Conference on Computational Vision and Medical Image Processing (VipIMAGE 2015) (Joao Manuel R S Tavares and R. M. Natal Jorge eds.), pp.239–243, CRC Press Tenerife, ISBN: 978-1-138-02926-2, Spain, October 19-21, 2015
- [9] V. Pedoia, S. Balbi, E. Binaghi. Fully Automatic Brain Tumor Segmentation by using Competitive EM and Graph Cut. Proceedings of International Conference on Image Analysis and Processing (ICIAP 2015) (V. Murino and E. Puppo eds.), Part I, LNCS 9279, pp. 568–578, Springer International Publishing Switzerland, ISBN 978-3-319-23230-0, Genova 7-11 September 2015.
- [10] E. Binaghi, M. Omodei, V. Pedoia, S. Balbi, D. Lattanzi, E. Monti. Automatic Segmentation of MR Brain Tumor Images using Support Vector Machine in Combination with Graph Cut. Proceedings of the International Conference on Neural Computation Theory and Applications (NCTA-2014), SCITEPRESS (Science and Technology Publications, Lda.) INSTICC Press, ISBN:9789897580543, pp. 152-157, Rome, October 2014.
- [11] E. Binaghi, V. Pedoia, D. Lattanzi, E. Monti, S. Balbi, R. Minotto. Fuzzy reference data estimation in brain tumor segmentation studies. Proceedings of IV ECCOMAS Conference VipImage, Computational Vision and Medical Image Processing (J. M. Tavares, N. Jorge, eds.), pp. 243-248, Taylor and Francis Group, Leiden NDL: CRC Press, ISBN:9781138000810, Madeira, October 2013.
- [12] V. Pedoia, E. Binaghi, S. Balbi, A. De Benedictis, E. Monti, R. Minotto. Glial brain tumor detection by using symmetry analysis. Proceedings of SPIE Medical Imaging: Image Processing (D. R. Haynor; S. Ourselin eds.), Vol. 8314, pages 831445–831445–8, ISBN:9780819489630, San Diego California, February 2012.
- [13] V. Pedoia, A. De Benedictis, G. Renis, E. Monti, S. Balbi, E. Binaghi. Manual labeling strategy for ground truth estimation in MRI glial tumor segmentation. Proceedings of the 1st International Workshop on Visual Interfaces for Ground Truth Collection in Computer Vision Applications VIGTA '12 (C.

Spampinato, B. Boom, H. Jiyin eds), pp. 8:1–8:4, ACM New York, ISBN:9781450314053, Capri, Italy, May 2012.

- [14] V. Pedoia, S. Strocchi, R. Minotto, E. Binaghi. Hemisphere Dominance Evaluation by using fMRI Activation Weighted Vector. Proceedings of Computational Modelling of Object Presented In Images: Fundamentals, Methods and Applications (Di Giamberardino et al. eds), ISBN:9780415621342, pp.303-306, Taylor&Francis Group, Rome, September 2012.
- [15] E. Monti, V. Pedoia, E. Binaghi, A. De Benedictis, S. Balbi. Graph based MRI analysis for evaluating the prognostic relevance of longitudinal brain atrophy estimation in post-traumatic diffuse axonal injury. Proceedings of Computational Modelling of Object Presented In Images: Fundamentals, Methods and Applications (Di Giamberardino et al. eds), ISBN:9780415621342, pp.302-305, Taylor&Francis Group, Rome, September 2012.
- [16] V. Pedoia, I. Gallo, E. Binaghi. Affine Spharm Registration: Neural Estimation of Affine Transformation in Spherical Domain. Proceedings of International Conference on Computer Vision Theory and Applications (VISAPP) (L. Mestetskiy and J. Braz eds.), pages 197–200, SciTePress, Portugal 2011.
- [17] V. Pedoia, V. Colli, S. Strocchi, C. Vite, E. Binaghi, L. Conte, fMRI analysis software tools: an evaluation Framework, Proceedings of SPIE Medical Imaging: Image Processing: Biomedical Applications in Molecular, Structural, and Functional Imaging, Vol. 7965, pp. 7965-37, Vilamoura - Algarve, Portugal 5-7 March 2011.
- [18] V. Pedoia, E. Binaghi, S. Balbi, A. De Benedictis, E. Monti, R. Minotto. 2D MRI brain segmentation by using feasibility constraints), Proceedings of VIPIMAGE , Computational Vision and Medical Image Processing (J.M. Tavares and N. Jorge eds), pp.251- 256, CRC Press, Olhao, Portugal, 2011.
- [19] M. Vanetti, E. Binaghi, B. Carminati, M. Carullo, E. Ferrari. Content-based Filtering in On-line Social Networks, Proceedings of ECML/PKDD Workshop on Privacy and Security issues in Data Mining and Machine Learning – Lecture Notes in Computer Science, vol. 6549, pp.127-140, Springer, 2010.
- [20] M. Vanetti, I. Gallo, E. Binaghi, V. Pedoia, M. Raspanti. 3D reconstruction of SEM micrographs by symmetrical self-organizing neural networks , Proceedings of XXI Int. Symp. Morphological Sciences, Messina, 2010.
- [21] A. Guidali, E. Binaghi, M. Guglielmin, M. Pascale. Investigating the Behaviour of Radial Basis Function Networks in Regression and Classification of Geospatial Data. Proceedings of Intelligent Data Engineering and Automated Learning - IDEAL2010 (C. Fyfe C, P. Tino , D. Charles D Garcia Osorio C., Yin HJ. eds.), vol. 6283 pp.110-117, ISBN:9783642153808, Springer, 2010.
- [22] M. Carullo, E. Binaghi. Machine Learning and Link Analysis for Web Content Mining Proceedings of the International Conference on Knowledge Discovery and Information Retrieval, KDIR 2010 (A. L. N. Fred, F. Joaquim eds.), SciTePress, pp.156- 161, ISBN:9789898425287, Valencia, Spain, October 2010.

- [23] A. Zamberletti, I. Gallo, M. Carullo, E. Binaghi. Neural Image Restoration for Decoding 1-D Barcodes Using Common Camera Phones. Proceedings of the International Conference on Computer Vision Theory and Applications VISAPP 2010, pp. 5-11, Angers, France, May 2010.
- [24] A. Nodari, E. Binaghi, M. Carullo, I. Gallo. Key Sample Point Selection: An Improvement of Shape Context Algorithm in Image Retrieval, Proceedings of Signal Processing, Pattern Recognition and Applications - SPPRA 2010 (B. Zagar, A. Kuijper, H. Sahbi eds.), vol. 678, Innsbruck, Austria, 2010.
- [25] E. Binaghi, V. Colli, I. Gallo, S. Strocchi, C. Vite, Neural Adaptive Restoration of Computed Radiography Images. Proceedings of World Congress on Medical Physics and Biomedical Engineering (O. Dossel and W. C. Schlegel eds.) , ISBN:9783642038815 vol. 25/IV, pp.330-333, Munich, Germany September 2009.
- [26] A. Guidali, L. Bianchi, E. Binaghi, F. Fagiani, A. Fedeli, I. Gallo, G.A. Lanzarone. Un Sistema Web-GIS per il supporto dinamico all'attività di Agenda 21 Laghi. Proceedings of 13° ASITA 2009, pp.1175-1180, ISBN:9788890313226, Bari, 2009.
- [27] M. Vanetti, I. Gallo, E. Binaghi. Dense Two-Frame Stereo Correspondence by Self-Organizing Neural Network, Proceedings of Image Analysis and Processing - ICIAP 2009, pp.1035- 1042 ISBN:9783642041457, Vietri sul Mare (SA), Springer 2009.
- [28] M. Carullo, E. Binaghi, I. Gallo. Soft Categorization and Annotation of Images With Radial Basis Function Networks . Proceedings of the International Conference on Computer Vision Theory and Applications (VISAPP 2009) (A. Ranchordas, H. Araújo eds.), pp.309- 314, INSTICC Press, Lisboa, Portugal, 2009.
- [29] I. Gallo, E. Binaghi. Assigning Automatic Regularization Parameters in Image Restoration, Proceedings of the International Conference on Computer Vision Theory and Applications (VISAPP 2009) (A. Ranchordas, H. Araújo eds.), pp.74- 77, ISBN:9789898111692, INSTICC Press, Lisboa, Portugal, 2009.
- [30] E. Binaghi, I. Gallo, R. Pisani, M. Raspanti, An adaptive neural network for the restoration of SEM pictures. pp.413-414. Proceedings of MC 2009 (M. A. Pabst, G. Zelling eds), ISBN:97783851250626 vol. 22009 Graz 2009.
- [31] E. Binaghi, M. Carullo, I. Gallo, M. Madaio. Text categorization of commercial web pages , Proceedings of IASTED Conference on Artificial Intelligence and Applications, Volume 1, pp.7-11, Innsbruck, February 2008.
- [32] I. Gallo, E. Binaghi, M. Raspanti. Semi-Blind Image Restoration using a Local Neural Approach. Proceedings of IASTED Conference on Signal Processing, Pattern Recognition, and Applications (R. Sablatnig and O. Scherzer eds.) , pp.227-231, ISBN: 9780889867178 , ACTA Press, Innsbruck, February 2008.

- [33] M. Carullo, E. Binaghi, I. Gallo, N. Lamberti. Clustering of Short Commercial Documents for the Web. Proceedings of the 19th IEEE International Conference on Pattern Recognition -ICPR 2008 (M.Ejiri, R. Kasturi, G. Sanniti di Baja eds.) , pp.1- 4 ISBN:9781424421756 , Tampa, Florida, 2008.
- [34] I. Gallo, E. Binaghi, M. Carullo, N. Lamberti. Named entity recognition by neural sliding window. Proceedings of Eighth IAPR Workshop on Document Analysis Systems-DAS 2008 (K. Kise and H. Sako eds.), pp.567- 573 , Nara, Japan, 2008.
- [35] E. Binaghi, I. Gallo, A. Guidali, M. Raspanti, G. Salvini. Adaptive Neural Regularization Assignment for Semi-Blind Biomedical Image Restoration. Proceedings of International Machine Vision and Image Processing Conference, pp.207- 207, Maynooth Ireland, September 2007.
- [36] I. Gallo, E. Binaghi. Information Extraction and Classification from Free Text Using a Neural Approach . Proceedings of 12th Iberoamerican Congress on Pattern Recognition CIARP07, Vol. 4756/2008, ISBN:9783540767244 pp.921- 929, Valparaíso, Chile, 2007.
- [37] I. Gallo, E. Binaghi, A. Macchi. Adaptive Image Restoration using a Local Neural Approach. Proceedings of the Second International Conference on Computer Vision Theory and Applications VISAPP 2007, pp.161- 164, ISBN:9789728865733, Barcelona, Spain, March 2007.
- [38] E. Binaghi, M. Raspanti, I. Gallo, A. Guidali, G. Salvini, Adaptive Restoration of SEM Micrographs: Preliminary Results. Proceedings of 8th Multinational Congress on Microscopy (J. Nebesarova , P. Hozak eds.), pp.529- 530, Praga, 2007.
- [39] E. Binaghi, I. Gallo, A. Baraldi, A. Gerhardinger. Neural Disparity Computation from IKONOS Stereo Imagery in the Presence of Occlusions. Proceedings of SPIE Symposium on 13th Image and Signal Processing for Remote Sensing XII, vol. 636563650B-1, pp.63650B-1-63650B-11, ISBN:9780819464606, Stockholm Sweden, September 2006.
- [40] E. Binaghi, I. Gallo, C. Fornasier, M. Raspanti. Growing Aggregation Algorithm for Dense Two-Frame Stereo Correspondence. Proceedings of First International Conference on Computer Vision Theory and Application VISAPP 2006 , pp.326-332, ISBN:9789728865405 Setubal, Portugal, February 2006.
- [41] C. Ghiselli, L.Bozzato, A. Trombetta, E. Binaghi. Semantic Web meets Virtual Museums: the Domus Naturae Project. Proceedings of ICHIM 2005 (X Perrot ed.), Paris, September 2005.
- [42] E. Binaghi, I. Gallo, M. Boschetti, P.A. Brivio. A neural adaptive algorithm for feature selection and classification of high dimensionality data. In Proceedings of 13th International Conference on Image Analysis and Processing –ICIAP 2005- (F. Roli S.Vituliano eds.), Lecture Notes in Computer Science, pp.753-760 - ISBN:9783540288695 vol. 3617, Springer , Cagliari, September 2005.

- [43] M. Raspanti, A. Manelli, E. Binaghi, I. Gallo, D. Martini. Entering 3D space: bringing depth to SEM micrographs. Proceedings of 7TH Multinational Congress on Microscopy , pp.387-388 ISBN:9789616303699 , Portoroz, Slovenia June 2005
- [44] L. Levrini, E. Binaghi, K. Biondi, C. Ghiselli, M. Bosco. Sistema di Supporto Automatico a Diagnosi e Trattamento delle Disfunzioni dell'Articolazione Temporo Mandibolare. Proceedings of 11° Congresso Nazionale del "Collegio dei Docenti di Odontoiatria, DOCTOR OS, vol. n.3, Roma Marzo 2004 .
- [45] E. Binaghi, I. Gallo, M. Boschetti, P.A. Brivio. A neural adaptive model for hyperspectral data classification under minimal training conditions. Proceedings of SPIE Conference on Image and Signal Processing for Remote Sensing, vol. 5573, pp.173-181, Maspalomas, Gran Canaria Spain, September 2004.
- [46] G. A. Lanzarone, E. Binaghi. Internet, musei virtuali e conoscenza del territorio. In Proceedings of Comunicazione e Divulgazione Scientifica per i musei archeologici e della Scienza, Atti Varese, pp.29-36, 2001.
- [47] E. Binaghi, I. Gallo, M. Boschetti, P.A. Brivio. Spectral/Spatial Data Fusion and Neural Networks for Vegetation Understory Information Extraction from Hyperspectral Airborne Images. Proceedings of SPIE IX Image and Signal Processing for Remote Sensing, vol. 5238, pp.288- 296 -Barcelona Spain, 2003.
- [48] M. Boschetti, I. Gallo, M. Meroni, P.A Brivio, E. Binaghi. Retrieval of vegetation understory information fusing hyperspectral and panchromatic airborne data. Proceedings of 3rd EARSeL Workshop on Imaging Spectroscopy, pp.483- 491, Herrsching, May 2003.
- [49] A. Rampini, P.A. Brivio, F. Rota-Nodari, E. Binaghi. Mapping Alpine glaciers changes from space. Proceedings of IEEE Int. Symp. on Geoscience and Remote Sensing IGARSS '02 . Remote Sensing: Integrating our View of the Planet, vol. 42002, 2199-2201, ISBN 0-7803-7537-8, Toronto Canada, June 2002.
- [50] M. Boschetti, I. Gallo, P. A. Brivio, E. Binaghi. Metodologie per l'analisi delle relazioni tra caratteristiche ambientali e distribuzione di siti archeologici: mappe di plausibilità di sviluppo per l'epoca Romana. Proceedings of VI Conf. ASITA, Rimini 2002.
- [51] S. Raffo, L. Boschetti, A. Baraldi, E. Binaghi, J.M. Gregoire, Implementazione e test di un algoritmo unsupervised change detection per l'individuazione di aree bruciate. Proceedings of VI Conf. ASITA, Rimini 2002.
- [52] Binaghi E., Gallo I., Pepe M., Integration of Scale-Space Filtering and Neural Techniques for High Resolution Remote Sensing Image Classification. Proceedings of SPIE Conference on Image and Signal Processing for Remote Sensing VIII, Vol. 4885, pp. 469-476, Crete, September 2002.

- [53] E. Binaghi, I. Gallo, M. Pepe, P.A. Brivio, S. Musazzi, A. Bassini. Neural classification of high resolution remote sensing imagery for power transmission lines surveillance. Proceedings of IEEE Int. Symp. on Geoscience and Remote Sensing IGARSS '02 - Remote Sensing: Integrating our View of the Planet, I: 500-502, Toronto (Canada), 2002.
- [54] P.A. Brivio, M. Maggi, E. Binaghi, I. Gallo and J.M. Grégoire. Exploiting spatial and temporal information for extracting burned areas from time series of SPOT-VGT data, Proceedings of International Workshop on the Analysis of MultiTemporal Remote Sensing Images, L. Bruzzone, P. Smits, Eds., Analysis of MultiTemporal Remote Sensing Images World Scientific, Singapore, pp. 132-139, Trento, September 2001.
- [55] E. Binaghi, P.A. Brivio I. Gallo, M. Pepe, A. Rampini. Robust recognition of urban patterns using a two stage soft -hard neural classification. Proceedings of Image and Signal Processing of Remote sensing VI, SPIE vol. 4170, Barcelona Spain, September 2000.
- [56] E. Binaghi. Soft Thematic Mapping from Remotely Sensed Data: Production, Interpretation and Accuracy Assessment. Proceedings of Image and Signal Processing of Remote sensing VI, SPIE vol. 4170, Barcelona Spain, September 2000 (invited).
- [57] E. Binaghi, P.A. Brivio, I. Gallo, M. Pepe, A. Rampini. Una metodologia per il riconoscimento automatico del tessuto urbano in ortofoto digitali a colori ad alta risoluzione, Proceedings of Convegno ASITA Genova, 3-6 Ottobre 2000.
- [58] A. Colombo, E. Binaghi, G.M. Lechi, A. Rampini. Subpixel estimation of areal extent of snow cover. Proceedings of Remote Sensing for Earth Science, Ocean, and Sea Ice Applications, SPIE Vol. 3868, pp. 434-444, Firenze, Settembre 1999.
- [59] E. Binaghi, P. A. Brivio, P. P. Ghezzi , A. Rampini, Uncertainty Management in Neural Classifiers of Remotely Sensed Data, Proceedings of Image and Signal Processing for Remote Sensing, Europto symposium(S. B. Serpico ed.) SPIE vol. 3871, pp.195-204, Firenze Italy, September 1999.
- [60] E. Binaghi, A. Rampini, P.A. Brivio, P. Ghezzi. Assessing the Accuracy of Soft Classifications using Fuzzy Set-Based Error Matrices. Proceedings of Italian Workshop on Fuzzy Logic, (F. Masulli, R. Parenti, G. Pasi, Eds.) Advances in Fuzzy Systems and Intelligent Techniques Shaker Publishing (NL), pp.149-155. Genova, June 1999.
- [61] E. Binaghi, S. Cuscuna', P. Manzini, A. Mazzetti, A. Vienna. An Expert System for Decision Support in the Management of Pipelines Laid in Unstable Areas. Proceedings of International Gas Research Conference (IGRC 98), San Diego, November 1998.
- [62] E. Binaghi, P.A. Brivio, P.P. Ghezzi, A. Rampini, M. Vicenzi. A Fuzzy Neural Network Model For the Estimation of Sub-Pixel Land Cover Composition. Proceedings of Image and Signal Processing for Remote Sensing, Europto Symposium, SPIE - Vol. 3500 , pp. 292-300, ISBN: 0-8194-2959-7, Barcelona (Spain), September 1998.

- [63] E. Binaghi, P. Madella, I. Gallo, A. Rampini. A Neural Refinement Strategy For Fuzzy Dempster-Shafer Classifier of Multisource Remote Sensing Images. Proceedings of Image and Signal Processing for Remote Sensing, Europto Symposium, *SPIE - Vol. 3500*, pp.214-224, ISBN: 0-8194-2959-7, Barcelona (Spain), September 1998.

- [64] A. Baraldi, E. Binaghi, P. Blonda, P.A. Brivio, A. Rampini. A Detailed Comparison of Neuro-Fuzzy Estimation of Sub_Pixel Land-Cover Composition from Remotely Sensed Data. Proceedings of Application and Science of Neural Networks, Fuzzy Systems, and Evolutionary Computation, Spie's 43rd Annual Meeting, San Diego, pp. 43-53, 1998.

- [65] E. Binaghi et al.. Hybrid Fuzzy Expert System for Decision Support in the Management of Pipelines in Area Subject to Geological Control, in Proceedings of Wilf'97, Bari 19-20 March, Palma Blonda Alfredo Petrosino (eds) :New Trends in Fuzzy Logic II, pp.327-336, 1997 (invited).

- [66] E. Binaghi, P.A. Brivio, P. Ghezzi, A. Rampini. A Fuzzy Hybrid Method for the Classification of Wetlands in the Venice lagoon, Proceedings of Image Processing, Signal Processing and Synthetic Aperture Radar for Remote Sensing (J. Desachy and S. Tajbakhsh, Eds.), Europto Series, SPIE [vol. 3217](#), pp. 298-305, ISBN: 0-8194-2649-0, London (UK), September 1997.

- [67] E. Binaghi, M. Pepe, F. Radice. Multistrategy Fuzzy Learning for Multisource Remote Sensing Classifiers. Proceedings of Image Processing, Signal Processing and Synthetic Aperture Radar for Remote Sensing, Europto Series, SPIE vol. 3217, pp.306-314, London, 1997

- [68] E. Binaghi, P. Madella, Inductive and Deductive reasoning Techniques for Fuzzy Dempster-Shafer Classifiers, in Proceedings of 7th World Congress of International Fuzzy Systems Association, pp.297-302, Prague (Czech Republic), July 1997.

- [69] Gonzales-Alonso F., Rampini A., Antoninetti M., Binaghi E., Pepe M., Ghezzi P., Tryfonopoulos N., Cuevas J. M., Curras R., Casanova J.L., 1997. Aplicacion del sistema FI.R.E.M.EN. en el estudio del gran incendio forestal de Requena en julio de 1994. II Congreso Foresta Espanol, Pamplona, 23-27 june 1997, pp. 179-183.

- [70] E. Binaghi, P. Madella, A. Rampini. Learning Fuzzy Dempster-Shafer Rules for Multisource Remote Sensing Classifiers, Proceedings of European Symp. on Intelligent Techniques, pp.171-175, Bari (Italy), March 1997.

- [71] M. Antoninetti. A. Balduzzi, E. Binaghi, M. Guglielmin, A. Rampini. Use of Thematic Maps Derived From a Digital Elevation model for Permafrost Classification in High Mountain Areas, Proceedings of IV Int. Symp. on Remote Sensing Cartography in High Mountain, Karlstad, pp. 1-16, Sweden, September 1996.

- [72] E. Binaghi, P. Madella, M.G. Montesano, A. Rampini. A fuzzy neural Network for Knowledge-Based Refinement in Multisource Data Classification, Proceedings of Sixth Int. Conference on Information Processing and Management of Uncertainty, IPMU'96, Granada, Spain, pp. 1079-1084, July 1996.
- [73] E. Binaghi E., I. Cerrani, P. Madella, M.G. Montesano, F. Pagnoni, A. Rampini. A fuzzy Knowledge-Based Decision Support System for Ground Water Vulnerability Assessment, Proceedings of International Society for Photogrammetry and Remote Sensing conference ISPRS '96, WG II/2, Milan (Italy), March 1996.
- [74] M. Antoninetti, E. Binaghi, P. Ghezzi, N. Lymberopoulos, M. Pepe, A. Rampini, D. Tryfonopoulos, Knowledge based fire risk mapping for decision support in fire management, Proceedings of International Workshop on Wildfire management, Models & Techniques, Athens, pp.65-68, June 3-4 1996.
- [75] A. Rampini, E. Binaghi, P. Carrara, M. Antoninetti, D. Tryfonopoulos, F. Gonzalez, J.L. Cuevas, J.L. Casanova, A. Mazzetti. F.I.R.E.M.EN. Fire Risk Evaluation in Mediterranean Environment, Proceedings of Earsel Int. Workshop of Remote Sensing and GIS applications to Forest Fire Management, Alcalá de Henares (Spain), pp.187-190, September 1995.
- [76] E. Binaghi, A. Mazzetti, M.G. Montesano, A. Rampini. Knowledge Base Refinement for Classifiers using Neural Networks. Proceedings of International Joint Conference on Information Science. Fourth Annual Conference on Fuzzy Theory & Technology, Wrightsville Beach (U.S.A.), pp.174-177, 1995 (invited).
- [77] E. Binaghi, P. Madella, M.G. Montesano, A. Rampini. Identification of glacier snow equilibrium line using a fuzzy rule-based classifier. Proceedings of IEEE International Geoscience and Remote Sensing Symposium, Vol. 3, pp.1768-1780, Florence (Italy), 1995.
- [78] E. Binaghi, M.L. Cirila, A. Rampini. A fuzzy logic based system for the quantification of visual inspection in clinical assessment, Proceedings of the 5th International Conference IPMU' 94, Paris (France), pp. 892-97, July 1994.
- [79] E. Binaghi, M.G. Montesano. A fuzzy set based connectionist model with domain knowledge dependent learning rule. Proceedings of IEEE IMACS Symposium on Signal Processing, Robotics and Neural Networks, Lille (France), pp. 472-75, 1994 (invited).
- [80] M. Antoninetti, M. Guglielmin, A. Rampini, E. Binaghi, Remote Sensing Techniques in High Mountain Areas: Mapping of Periglacial and Glacial Boundaries. 3rd Int. Symp. on High Mountain Remote Sensing Cartography, November 7-12, Mendoza, Argentina, pp.60-67, 1994.

- [81] E. Binaghi, A. Rampini, Integration of neural network techniques in Fuzzy Logic-based classification of multisource remote sensing data, Int. Conference on Image Processing: Theory and Applications (G. Vernazza, A.N. Venetsanopoulos, C. Braccini eds.), Elsevier Science Publ., pp.393-396, Sanremo (Italy), June 1993.
- [82] E. Binaghi, A. Mazzetti, R. Orlando, A. Rampini. Integration of fuzzy reasoning techniques in error back-propagation learning algorithm. Proceedings of Italian Workshop on Neural Networks- WIRN'93, Vietri sul Mare, pp 292-297, May 1993.
- [83] E. Binaghi, A. Mazzetti. Problem dependent learning rule in feedforward neural network, Proceedings of the 1st Workshop on Fuzzy Set Theory in Real Applications, International Issue of Automazione e Strumentazione, pp. 44-49, Milan (Italy), May 1993.
- [84] M. Antoninetti, E. Binaghi, M. Guglielmin, A. Rampini. Detection of mountain permafrost using an integrated remote sensing approach. Proceedings of International Symposium on Remote Sensing in Arid and Semiarid Regions, pp.53-60, Lanzhou (China), August 1993.
- [85] E. Binaghi, A. Della Ventura, A. Grittini, A. Rampini. Approximate reasoning techniques in remote sensing data analysis. Proceedings of the 4th European Conference on Geographical Information Systems - EGIS '93, (J. Harts, H. F.L. Ottens, H J. Scholten), pp. 503-511, De Bergdrukkerij Press, Genoa (Italy) March 1993.
- [86] E. Binaghi, A. Della Ventura, A. Rampini. Fuzzy Reasoning in Multisource Geographic Data Classification. Proceedings of the 1st Workshop on Fuzzy Set Theory in Real Applications, Milan (Italy), International Issue of Automazione e Strumentazione, pp. 50-53, May 1993.
- [87] E. Binaghi, I. Gagliardi, R. Schettini. Fuzzy logic in color indexing, Proceedings of the 1st Workshop on Fuzzy Sets Theory in Real Application, Milan (Italy), International Issue of Automazione e Strumentazione, pp. 61-65, May 1993.
- [88] E. Binaghi, A. Madella, P. Madella, A. Rampini. Integration of remote sensing images in a geographic information system for the study of Alpine glaciers. Proceedings of the 12th EARSeL Symposium on Remote Sensing for Monitoring the Changing Geography of Europe EGER, HUNGARY (Peter Winkler ed.), A.A. Balkema Press, SEP 08-11, 1992, pp. 173-78, 1993.
- [89] M. Antoninetti, E. Binaghi, M. D'Angelo, A. Rampini. The integrated use of satellite and topographic data for forest fire hazard mapping in NW Sardinia, Proceedings of the 12th EARSeL Symposium on Remote Sensing for Monitoring the Changing Geography of Europe EGER, HUNGARY (Peter Winkler ed.), A.A. Balkema Press, SEP 08-11, 1992, pp. 179-84, 1993.
- [90] E. Binaghi, I. Gagliardi, R. Schettini. Indexing and fuzzy logic-based retrieval of color images, Proceedings of IFIP Trans. Visual Databases Systems II (E. Knuth, L.M. Wegner eds.), North-Holland, pp. 79-92, Budapest, Hungary, 30 Sept-3 Oct 1992.

- [91] E. Binaghi, A. Rampini, E. Zini. Multiple uncertainty management in image classification with multisource data. Proceedings of 6th Int. Conference on Image Analysis and Processing, Como 4-6 Sept 1991, Progress in Image Analysis and Processing II (V. Cantoni, M. Ferretti, S. Levialdi, R. Negrini, R. Stefanelli eds.), pp. 443-47, World Scientific Press, 1992.
- [92] E. Binaghi, Empirical learning for fuzzy knowledge acquisition, Proceedings of the 2nd International Conference of Fuzzy Logic and Neural Networks, Iizuka (Japan), pp. 245-51, 1992, (invited) .
- [93] E. Binaghi, A. Rampini. Learning of uncertain classification rules in biomedical images: The case of colposcopic images, Proceedings of Information Processing in Medical Imaging (A.C.F. Colchester and D.J. Hawkes eds, Lecture Notes in Computer Science, n. 511, Springer-Verlag, pp. 434-43, .), 12th International Conference, IPMI '91 Wye, July 1991.
- [94] E. Binaghi, Learning of uncertain classification rules in medical diagnosis, Symbolic and quantitative approaches to uncertainty. Proceedings of European Conference ECSQAU (R. Kruse ed.), Lecture Notes in Computer Science, n. 548, Springer-Verlag, pp. 115-119, , Marseille, October 15-17 1991.
- [95] E. Binaghi, A. Della Ventura, A. Rampini, R. Schettini. A fuzzy knowledge-based system for biomedical image interpretation, Proceedings of the 3rd International Conference on Information Processing and Management of Uncertainty in Knowledge-Based Systems IPMU '90, Paris (France), pp. 170-72, July 1990.
- [96] E. Binaghi, A. Della Ventura, A. Rampini, R. Schettini . A strategy based on fuzzy set theory for similarity judgement between structures, Proceedings of Int. Conference on Image Analysis and Processing, Progress in Image Analysis and Processing (V. Cantoni, L.P. Cordella, S. Levialdi, G. Sanniti di Baja eds.), World Scientific Press, pp. 267-74, 1990.
- [97] Binaghi E., Della Ventura A., Rampini A., Schettini R., A knowledge-based environment for assessment of color similarity, in Proc. of IEEE International Conference on Tools for Artificial Intelligence, IEEE Computer Society Press, pp. 768-75, Herndon, VA, USA , November 1990.
- [98] E. Binaghi, A. Della Ventura, A. Rampini, R. Schettini, A. Torresin. Integration of Quantitative and AI Techniques for CT Images Analysis. Proceedings of the IEEE International Conference on Image Processing, pp 430-434, Singapore, 1989.
- [99] E. Binaghi, D. Orban, A. Rampini. Fuzzy Logic Based Tools for Classification and Reasoning with Uncertainty. Proceedings of the IEEE International Workshop on Tools for AI, Fairfax (VA), pp. 572-576, 1989.
- [100] M. Alderighi, E. Binaghi, G. Pacinotti, G.R. Sechi. Education in Designing Reliable Software: program specification and validation, Proceedings of Education and Application of Computer

Technology (M. De Blasi, J.Donio, E. Luque, E. Scerri Eds.), Fratelli Laterza Pub., pp.97-114, Bari (Italy), 1988.

- [101] E. Binaghi, G. Pasi, G.R. Sechi. A Computing Model for Prototypes of Computational Machines Solving Complex Problems. Proceedings of IEEE Micro 21 Conference, S. Diego, pp.134-138, 1988.
- [102] E. Binaghi, G. Pasi, G.R. Sechi. The acquisition of knowledge about digital electronic systems by using formal architectural models. Proceedings of Education and Application of Computer Technology (M. De Blasi, J. Donio, E. Luque, E. Scerri Eds.), Fratelli Laterza Pub., pp.199-220, Bari (Italy), 1988.
- [103] M. Alderighi, E. Binaghi, G. Pacinotti, G.R. Sechi. An Axiomatic Approach to Computing Models: the sorting machine. Proceedings of Thirty-Sixth ISMM International Conference on Mini and Microcomputers, pp.142-146. 1988.
- [104] A. Vercesi A.; F. Zerbetto, G. Minervini, M. Bisiach, E. Binaghi, G. Pasi, G.R. Sechi G.R.. Influence of climatic factors on the activity of microbial antagonist of Botrytis Cinerea in vineyard: a statistical analysis. Proceedings of the conference: Influence of environmental factors on the control of grape pest, disease and need, pp.211-221, 1987.
- [105] M. Alderighi, E. Binaghi, G.R. Sechi. Designing complex computational systems in physics experiments: a scientific approach towards a model based method. Microprocessor advanced Architectures and Design Methodologies. First biennial Meeting of the C.M.U. on Micro-computers and their applications (M. De Blasi, E. Luque Eds.), Fratelli Laterza Bari, pp. 89-103, Bari, October 29-31 1986.

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