

Giovanni Ramponi

Senior Scholar

University of Trieste, Italy

formerly Professor of Electronics at Dept. of Engineering and Architecture

Personal data:

- Born: November 28, 1956
- Marital status: Married with Marina
- Children: Anna, Francesco, Giacomo
- Grandchildren: Giovanni, Francesca

Education:

- [1981] Laurea Degree in Electronic Engineering (summa cum laude), University of Trieste
- [1981] Professional Engineer's License

Positions:

- [2006-2024] Head of the Image Processing Laboratory, University of Trieste
- [2000-2024] Full professor, University of Trieste
- [2018-2021] Member of the Academic Senate, University of Trieste
- [2017-2021] Coordinator of the studies for the Laurea degree in Electronic and Computer Engineering, University of Trieste
- [1993-2021] Member of the Board for the PhD Program in Information Technology, University of Trieste
- [2003-2006] Vice-Dean, Faculty of Engineering, University of Trieste
- [1992-2000] Associate professor, University of Trieste
- [1983-1992] Research engineer, University of Trieste

Teaching activities:

- [2005-2024] course on Digital Image Processing, University of Trieste
- [2004-2024] course on Digital Signal Processing, University of Trieste
- [2000-2006] course on Electronics, University of Trieste (Pordenone)
- [1991-2004] course on Applied Electronics, University of Trieste
- [1998] Third European Course on Recent Advances in Image Processing and Analysis
- [1990-1997] course on Image Processing, graduate School of Radiology, Trieste
- [1990] EURASIP short course on Linear and Nonlinear M-D Filtering
- [1983-1995] seminars on Digital Signal Processing, University of Trieste
- [1983-1994] seminars on Applied Electronics, University of Trieste
- [1984-1995] Counsellor of the IEEE Student Branch of the University of Trieste

Management of scientific projects:

- [2010-2013] CHIRON: Cyclic and person-centric Health management: Integrated approach for home, mobile and clinical environments (EU Artemis Joint Undertaking - Trieste Research Unit)
- [2005-2008] A knowledge based model for digital restoration and enhancement of images concerning archaeological and monumental heritage of the Mediterranean coast - (FIRB project no. RBNE039LLC - Trieste Research Unit)

- [2003-2005] Low power algorithms and architectures for advanced multimedia applications (PRIN project No.2003098078 - Trieste Research Unit)
- [2003-2004] SiRAD: Digital Restoration of Photographic Archives (supported by the Regione Autonoma Friuli Venezia Giulia)
- [1998-1999] Characterization of Polynomial Filters for Image Enhancement and the Extraction of Invariant Image Features (European TMR contract)
- [1996-1998] Nonlinear Model-based Analysis and Description of Images for Multimedia Applications (ESPRIT LTR 20229 - NOBLESSE)
- [1992-1995] Advanced topics in high-order statistics (ESPRIT WG 6620 - ATHOS)
- [1999-2002] Vice-president of the CINE (National University Consortium for Electronics)
- [1997-1999] Microelectronics: Integrated Circuits for Low-cost Multimedia Systems (CNR-MURST - Trieste Research Unit)
- [1996-1998] Realization of Digital Signal and Image Processing Algorithms (MURST 40 % - Trieste Research Unit)
- [1996-2002] Trieste Research Unit of the CINE
- [1993-2016] Trieste Research Unit of the CNR (Electronics group)

Scientific activities:

• Participation in other research projects:

- [2008-2011] ELADIN 2: High-Dynamic-Range Image and Video Processing (supported by the Regione Autonoma Friuli Venezia Giulia)
- [2006-2007] ELADIN: High-Dynamic-Range Image and Video Processing (supported by the Regione Autonoma Friuli Venezia Giulia)
- [2003-2005] SCHEMA: Content-based semantic scene analysis and information retrieval (EU NoE, affiliated member)
- [2001-2005] Information and knowledge management for integrated media communication (COST Action 276)
- [1995-1999] Intelligent processing and facilities for communication terminals (COST Action 254)
- [1992-1996] Nonlinear and adaptive techniques in digital image processing, analysis and computer vision (ESPRIT BRA 7130 - NAT)
- [1990-1994] Applications of digital signal processing to communications (COST Action 229)

• Editor / Chair:

- [2020-today] Academic Editor of Electronics (MDPI)
- [1997-today] Associate Editor of the Journal of Electronic Imaging
- [2002-2006] Associate Editor of the IEEE Transactions on Image Processing
- [1998-2002] Associate Editor of the IEEE Signal Processing Letters
- [2013] General Co-Chairman of ISISPA-13, IEEE-EURASIP 8th Internat. Symp. on Image and Signal Processing and Analysis, Trieste, Italy, September 4-6, 2013
- [2011] Technical Programme Co-Chairman of ISISPA-11, IEEE-EURASIP 7th Internat. Symp. on Image and Signal Processing and Analysis, Dubrovnik, Croatia, September 4-6, 2011
- [2003] Technical Programme Co-Chairman of NSIP-03, IEEE-EURASIP Workshop on Nonlinear Signal and Image Processing, Grado, Italy, June 2003
- [1996] Technical Programme Chairman of EUSIPCO-96, European Signal Processing Conference, Trieste, Sept. 1996

• Pending international patents:

- [2004] WO 2004/109598: "Non-linear image interpolator along gradient of samples", publication date 16 Dec. 2004, Koninkl. Philips Electronics NV (co-inventor)
- [2004] WO 2004/039063: "Sharpness Enhancement algorithm for pixelated displays", publication date 6 May 2004, Koninkl. Philips Electronics NV (co-inventor)
- [2003] WO 03/102903: "Video Scaling", publication date 11 Dec. 2003, Koninkl. Philips Electronics NV (co-inventor)
- [2000] WO 00/42778: "Sharpness enhancement", publication date 20 July 2000, Koninkl. Philips Electronics NV (co-inventor)
- [1999] WO 99/56247: "Image interpolation", publication date 4 Nov. 1999, Koninkl. Philips Electronics NV (co-inventor)

- **Specials:**

- [2011] J. of Real-time Image Processing: Special Issue on Algorithms and Architectures for Real-time Image/Video Enhancement, 2010 (with S. Saponara, S. Marsi, G. de Haan, E. Bellers)
- [2004] EURASIP Journal of Applied Signal Processing: Special Issue on Nonlinear Signal and Image Processing (with G. Sicuranza, G. Vernazza, C. Regazzoni, G.L. Foresti)
- [2002] Eusipco-2002: Special Session on "Low-Power Algorithms/Architectures for Image and Video" (with M. Ansorge)
- [1999] J. of Electronic Imaging: Special Section on "Nonlinear and Model-Based Image Analysis" (with S. Marshall)

- **Technical Committees / Conference reviews (recent):**

- [1999-2024] ICIP: IEEE International Conference on Image Processing
- [2000-2024] IS&T/SPIE Int'l Symp. on Electronic Imaging: Image Processing: Algorithms and Systems, San Jose, California
- [1998-2002] EUSIPCO: European Signal Processing Conference
- [2002-2018] ACIVS: Advanced Concepts for Intelligent Vision Systems, Belgium
- [2008] EUSIPCO: European Signal Processing Conference (Area Chair)
- [2006] EUSIPCO: European Signal Processing Conference
- [2005] SPIE Int'l Symp. on Optical Engineering and Instrumentation: Mathematical Methods in Pattern and Image Analysis, San Diego, California
- [2004] MELECON 2004: 12th IEEE Mediterranean Electrotechnical Conference. Dubrovnik, Croatia
- [2003] IASTED Int'l Conf. on Signal Processing, Pattern Recognition and Applications (SPPRA-2003), Rhodes, Greece
- [2002] ICECS 2002: IEEE International Conference on Electronics, Circuits and Systems, Dubrovnik, Croatia
- [2001] NSIP-01: IEEE-EURASIP Workshop on Nonlinear Signal and Image Processing, Baltimore, MD
- [2000] ICPR 2000: International Conference on Pattern Recognition, Barcelona, Spain
- Member of the "Albo dei Revisori" of the Italian Ministry of Education, University and Research
- Member of the "Albo Esperti" (L.297/99) of the Italian Ministry of Education, University and Research

Giovanni Ramponi has authored or co-authored more than 200 contributions including edited books and book chapters, international journal and conference proceedings papers, and patents. His research interests encompass linear and nonlinear digital signal processing, enhancement and feature extraction in images and image sequences.

He is a Life Senior Member of the IEEE.