
Giovanni Poggi

General Information

Full professor of Telecommunications
Department of Electrical Engineering and Information Technology (DIETI)
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Positions

2019-2020 President of Commission for the National Scientific Habilitation in Telecommunications, MIUR
2016-2018 Vice Director of DIETI - Department of Electrical Engineering and Information Technology, UniNA
2009-2016 Chair of the Bachelor/Master Program in Telecommunication Engineering, UNINA
2008 Visiting professor, University of Nice-Sophia Antipolis, i3S Laboratory directed by prof. Michel Barlaud
2006-2008 Vice Director of DIBET - Department of Biomedical, Electronic and Telecommunication Engineering, UniNA
2005-2009 Chair of the PhD program in Electronic and Telecommunication Engineering, UniNA
2002-today Full professor, Department of Electrical Engineering and Information Technology, UniNA
1998-2002 Associate professor, Faculty of Engineering, UniNA
1992 Visiting scholar, Stanford University, USA, Information Systems Laboratory directed by prof. Robert Gray
1990-1998 Assistant professor, Faculty of Engineering, UniNA

Education

Laurea (cum laude) in Electronic Engineering, University Federico II of Naples, Faculty of Engineering, Naples (I), July 1988

Research Interests

The scientific activity is mostly centered on the processing of digital images and videos. The main applicative fields are remote sensing and digital image forensics, while the main research topics, always concerning digital images and videos, are modeling, description, retrieval, compression, segmentation, classification, restoration, fusion, object detection and localization, source identification, liveness detection. This activity led to the publication of about 50 articles and 100 conference papers in the most prestigious journals and conferences of the sector. These documents have received about 3000 citations with an h-index of 29 (Google Scholar), or about 2000 citations with an h-index of 23 (Scopus). To guarantee reproducible research, the code of most proposed algorithms is published on-line (www.grip.unina.it). In the year 2000 Giovanni Poggi founded and still heads the Image Processing Research Group (GRIP) at DIETI, which currently includes two professors, Luisa Verdoliva and Giuseppe Scarpa, three post-Docs, and two PhD students.

Main research activities in digital image forensics

- Detection and localization of image/video manipulations by deep neural networks
- Source identification based on noise residuals (PRNU, noiseprint)
- Copy-move detection and localization in images and videos
- Co-occurrence-based local descriptors for image forgery detection and localization
- Deep learning methods for multimedia forensics
- Liveness detection of biometric traits

Main research activities in remote sensing

- Semantic classification of images by convolutional neural networks
- Despeckling of SAR images by non-local filtering

- Development of a benchmarking methodology for SAR image despeckling techniques
- Denoising of SAR interferograms using Markov Fields and non-local filtering
- Interactive segmentation and classification of multitemporal SAR images
- Segmentation of multiresolution images through textural analysis and watershed transformation
- Theory tree-structured Markov random fields and application to the segmentation of remote sensing images
- Compression of multispectral and hyperspectral optical images by wavelet transform
- Techniques based on vector quantization for the compression of raw SAR data

Bibliometric data (November 30, 2020)

- 54 journal papers, 99 conference papers
- 4800 citations overall, h-index 36 (Google Scholar)
- 3117 citations overall, h-index 30 (Scopus)

Funding

- 2020-2024 DISCOVER, US DARPA SemaFor project, RU co-PI, 855 k\$
- 2018-2020 EarthAlytics Pipe Monitoring, POR Campania, Coordinator, 259 kE
- 2014-2017 Very high spatial and spectral resolution remote sensing: a novel integrated data analysis system, MIUR-PRIN, RU Coordinator, 72 kE
- 2011-2014 IDES Sviluppo di algoritmi per l'elaborazione di immagini telerilevate, private grant from CIRA, 100 kE
- 2006-2008 AIBER: Accesso Intelligente all'informazione integrata di Beni culturali in ambito Regionale, MIUR-FAR, RU Coordinator, 65 kE
- 2006-2007 Segmentazione bayesiana di immagini telerilevate multirisoluzione, MIUR-PRIN, RU Coordinator, 24 kE
- 2005-2006 Studio e progettazione di un Compressore Video a basso Bit Rate, private grant from ASE, 30 kE
- 2003-2004 Compressione di immagini telerilevate multitemporali mediante segmentazione bayesiana, MIUR-PRIN, RU Coordinator, 42 kE
- 2002-2003 Segmentazione e compressione di immagini iperspettrali, MIUR-PRIN, RU Coordinator, 48 kE
- 2001-2003 LABNET: Metodologie e tecnologie delle telecomunicazioni per esperimenti di didattica su laboratori remoti, Activity Coordinator, 98 kE
- 2000-2001 Filtraggio di immagini SAR interferometriche per lo srotolamento di fase, ASI, RU Coordinator, 12 kE

Fellowships

- IEEE member

Professional services

Associate Editor

- IEEE Transactions on Image Processing (2004-2008)
- Elsevier Signal Processing (2009-2011)
- MDPI Remote Sensing (2017-today)

Guest Editor

- "Deep Learning for Remote Sensing" for MDPI Remote Sensing, Oct. 2017-Oct. 2018

Conference/Workshop/School organizer

- Organizer (with Luisa Verdoliva) 5th IEEE-EURASIP Summer School on Signal Processing, Capri (I), 2017
- Special Session Chair (with Ricardo de Queiroz) IEEE International Conference on Image Processing, Paris (F) 2014
- Technical program Chair (with Andreas Floros) 17th Conference on Digital Signal Processing, Corfù (Gr) 2011
- Organizer (with Luigi Cordella) Italian PhD Winter School in Information Engineering, Napoli (I), 2009
- Organizer (with Luigi Cordella) Italian PhD Winter School in Information Engineering, Napoli (I), 2008
- Organizer (with Luigi Cordella) Italian PhD Winter School in Information Engineering, Napoli (I), 2007
- Organizer (with L. Cordella, G. Zarone) Italian PhD Winter School in Information Engineering, Napoli (I), 2006

Reviewer for International Journals.

- Elsevier Digital Signal Processing
- Elsevier Pattern Recognition Letters
- Elsevier Signal Processing - Image Communication
- IEEE Geoscience and Remote Sensing Letters
- IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing
- IEEE Signal Processing Letters
- IEEE Transactions on Aerospace and Electronic Systems
- IEEE Transactions on Circuits and Systems for Video Technology
- IEEE Transactions on Geoscience and Remote Sensing
- IEEE Transactions on Image Processing
- IEEE Transactions on Information Forensics and Security
- IEEE Transactions on Signal Processing
- MDPI Remote Sensing
- Springer Multimedia Tools and Applications
- Taylor&Francis International Journal of Remote Sensing

PhD student supervision

- Luca D'Amiano (2014-2017)
- Francescopaolo Sica (2012-2015) co-supervised with Gianfranco Fornaro of CNR-IREA
- Davide Cozzolino (2012-2015)
- Mariana Poderico (2009-2012) co-supervised with Luisa Verdoliva of UniNA
- Marcella Matrecano (2008-2011)
- Cesario V. Angelino (2006-2010) co-supervised with Michel Barlaud, Eric Debreuve of Univ. Nice-Sophia Antipolis
- Sara Parrilli (2005-2008) co-supervised with Luisa Verdoliva of UniNA
- Raffaele Gaetano (2005-2008)
- Luca Cicala (2004-2007)
- Marco Cagnazzo (2001-2004) co-supervised with Michel Barlaud, Marc Antonini of Univ. Nice-Sophia Antipolis
- Giuseppe Scarpa (2001-2004)
- Giancarlo Ferraiuolo (2000-2003)
- Luisa Verdoliva (1998-2001)
- Ciro D'Elia (1998-2001)
- Arturo R. P. Ragozini (1996-1999)

Teaching activity

- Signal Theory (9 CFU), Bachelor program in Information Engineering, UniNA
- Traffic Theory (6 CFU), MSc program in Telecommunication Engineering, UniNA

Past

- Signal Theory, Bachelor program in Telecommunication Engineering/Computer Engineering, UniNA 2009-today
- Traffic Theory, MSc program in Telecommunication Engineering, UniNA, 2011-today
- Telecommunication Networks, Bachelor/MSc/Laurea program in Telecommunication Engineering, UniNA, 1994-2010
- Information Theory, Laurea/MSc program in Telecommunication Engineering, UniNA 2000-2006
- Multimedia Signal Processing, (2 years) UniNA
- Electrical Communications (2 years), Telecommunications Lab (3 years), Probability (1 year), UniNA
- Telecommunications (1 year), Air Force Academy, Pozzuoli (I)
- Telecommunication Networks (4 years), Telecommunication Systems (2 years), Information Theory (1 year), University Parthenope of Naples (I)
- Telecommunication Networks (2 years), Second University of Naples (I)

Publications

Peer-reviewed Journals

- [1] D.Cozzolino, F.Marra, D.Graganiello, G.Poggi, L.Verdoliva,, "Combining PRNU and noiseprint for robust and efficient device source identification," *Eurasip Journal on Information Security*, vol.2020, issue 1, February 2020.
- [2] F.Marra, D.Graganiello, L.Verdoliva, G.Poggi, "A Full-Image Full-Resolution End-to-End-Trainable CNN Framework for Image Forgery Detection," *IEEE Access*, vol.8, pp. 133488-133502, July 2020.
- [3] D.Cozzolino, L.Verdoliva, G.Scarpa, G.Poggi, "Nonlocal CNN SAR image despeckling," *MDPI Remote Sensing*, vol.12, March 2020.
- [4] L.D'Amiano, D.Cozzolino, G.Poggi, L.Verdoliva, "A PatchMatch-based dense-field algorithm for video copy-move detection and localization," *IEEE Transactions on Circuits and Systems for Video Technology*, vol.29, pp.669-682, March 2019.
- [5] S.Vitale, D.Cozzolino, G.Scarpa, L.Verdoliva, G.Poggi, "Guided patchwise nonlocal SAR despeckling," *IEEE Transactions on Geoscience and Remote Sensing*, vol.57, pp. 6484-6498, September 2019.
- [6] F.Marra, G.Poggi, C.Sansone, L.Verdoliva, "A deep learning approach for iris sensor model identification," *Elsevier Pattern Recognition Letters*, vol.113, pp.46-53, October 2018.
- [7] F.Sica, D.Cozzolino, X.X.Zhu, L.Verdoliva, G.Poggi, "InSAR-BM3D: a nonlocal filter for SAR interferometric phase restoration," *IEEE Transactions on Geoscience and Remote Sensing*, vol.56, pp.3456-3467, June 2018.
- [8] F.Sica, D.Cozzolino, L.Verdoliva, G.Poggi, "The offset-compensated nonlocal filtering of interferometric phase," *MDPI Remote Sensing*, vol.10, no.9, August 2018..
- [9] F.Raimondi, F.Migliaro, L.Verdoliva, D.Graganiello, G.Poggi, R.Kosova, C.Sansone, G.Vallone, L.Capasso, "Visual assessment versus computer-assisted gray scale analysis in the ultrasound evaluation of neonatal respiratory status," *PLoS ONE*, vol.13, October 2018.
- [10] L.Verdoliva, D.Cozzolino, G.Poggi, "A reliable order-statistics-based approximate nearest neighbor search algorithm," *IEEE Transactions on Image Processing*, vol.26, pp.237-250, January 2017.
- [11] F.Marra, G.Poggi, C.Sansone, L.Verdoliva, "A study of co-occurrence based local features for camera model identification," *Springer Multimedia Tools and Applications*, vol.76, pp.4765-4781, February 2017.
- [12] F.Marra, G.Poggi, C.Sansone, L.Verdoliva, "Blind PRNU-based image clustering for source identification," *IEEE Transactions on Information Forensics and Security*, vol.12, pp.2197-2211 September 2017.
- [13] D.Graganiello, G.Poggi, G.Scarpa, L.Verdoliva, "SAR image despeckling by soft classification," *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*, vol.9, pp.2118-2130, June 2016.
- [14] G.Di Martino, A.Di Simone, A.Iodice, G.Poggi, D.Riccio, L.Verdoliva, "Scattering-Based SARBM3D," *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*, vol.9, pp.2131-2144, June 2016.
- [15] D.Graganiello, G.Poggi, C.Sansone, L.Verdoliva, "Using iris and sclera for detection and classification of contact lenses," *Elsevier Pattern Recognition Letters*, vol.82, pp.251-257, October 2016.
- [16] D.Graganiello, G.Poggi, C.Sansone, L.Verdoliva, "An investigation of local descriptors for biometric spoofing detection," *IEEE Transactions on Information Forensics and Security*, vol.10, pp.849-863, April 2015.
- [17] A.Errico, C.V.Angelino, L.Cicala, G.Persechino, C.Ferrara, M.Lega, A.Vallario, C.Parente, G.Masi, R.Gaetano, G.Scarpa, D.Amitrano, G.Ruello, L.Verdoliva, G.Poggi, "Detection of environmental hazards through the feature-based fusion of optical and SAR data: a case study in southern Italy," *Taylor&Francis International Journal of Remote Sensing*, vol.36, pp.3345-3367, July 2015.
- [18] D.Cozzolino, G.Poggi, L.Verdoliva, "Efficient dense-field copy-move forgery detection," *IEEE Transactions on Information Forensics and Security*, vol.10, pp.2284-2297, November 2015.
- [19] D.Graganiello, G.Poggi, C.Sansone, L.Verdoliva, "Local contrast phase descriptor for fingerprint liveness detection," *Elsevier Pattern Recognition*, vol.48, pp.1046-1054, April 2015.
- [20] R.Gaetano, G.Masi, G.Poggi, L.Verdoliva, G.Scarpa, "Marker-controlled watershed-based segmentation of multiresolution remote sensing images," *IEEE Transactions on Geoscience and Remote Sensing*, vol.53, pp.2987-3004, June 2015.
- [21] F.Sica, D.Reale, G.Poggi, L.Verdoliva, G.Fornaro, "Nonlocal adaptive multilooking in SAR multipass differential interferometry," *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*, vol.8, pp.1727-1742, April 2015.

- [22] L.Verdoliva, R.Gaetano, G.Ruello, G.Poggi, "Optical-driven nonlocal SAR despeckling," *IEEE Geoscience and Remote Sensing Letters*, vol.12, pp.314-318, February 2015.
- [23] G.Chierchia, G.Poggi, C.Sansone, L.Verdoliva, "A bayesian-MRF approach for PRNU-based image forgery detection," *IEEE Transactions on Information Forensics and Security*, vol.9, pp.554-567, April 2014.
- [24] G.Di Martino, M.Poderico, G.Poggi, D.Riccio, L.Verdoliva, "Benchmarking framework for SAR despeckling," *IEEE Transactions on Geoscience and Remote Sensing*, vol.52, pp.1596-1615, March 2014.
- [25] C.-A.Deledalle, L.Denis, G.Poggi, F.Tupin, L.Verdoliva, "Exploiting patch similarity for SAR image processing: The nonlocal paradigm," *IEEE Signal Processing Magazine*, vol.31, pp.69-78, July 2014.
- [26] R.Gaetano, D.Amitrano, G.Masi, G.Poggi, G.Ruello, L.Verdoliva, G.Scarpa, "Exploration of multitemporal COSMO-skymed data via interactive tree-structured MRF segmentation," *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*, vol.7, pp.2763-2775, July 2014.
- [27] D.Cozzolino, S.Parrilli, G.Scarpa, G.Poggi, L.Verdoliva, "Fast adaptive nonlocal SAR despeckling," *IEEE Geoscience and Remote Sensing Letters*, vol.11, pp.524-528, February 2014.
- [28] D.Gagnaniello, G.Poggi, C.Sansone, L.Verdoliva, "Wavelet-Markov local descriptor for detecting fake fingerprints," *IEEE Electronics Letters*, vol.50, pp.439-441, March 2014.
- [29] G.Poggi, D.Cozzolino, L.Verdoliva, "Self-organizing maps for the design of multiple description vector quantizers," *Elsevier Neurocomputing*, vol.122, pp.298-309, December 2013.
- [30] R.Gaetano, G.Scarpa, G.Poggi, "Hierarchical texture-based segmentation of multiresolution remote sensing images," *IEEE Transactions on Geoscience and Remote Sensing*, vol.47, pp.2129-2141, July 2009.
- [31] M.Cagnazzo, S.Parrilli, G.Poggi, L.Verdoliva, "Costs and advantages of object-based image coding with shape-adaptive wavelet transform," *Eurasip Journal on Image and Video Processing*, vol.2007, ID 78323, April 2007.
- [32] M.Cagnazzo, S.Parrilli, G.Poggi, L.Verdoliva, "Improved class-based coding of multispectral images with shape-adaptive wavelet transform," *IEEE Geoscience and Remote Sensing Letters*, vol.4, pp.566-570, October 2007.
- [33] M.Cagnazzo, G.Poggi, L.Verdoliva, "Region-based transform coding of multispectral images," *IEEE Transactions on Image Processing*, vol.16, pp. 2916-2926, December 2007.
- [34] M.Cagnazzo, L.Cicala, G.Poggi, L.Verdoliva, "Low-complexity compression of multispectral images based on classified transform coding," *Elsevier Signal Processing: Image Communication*, vol.21, pp.850-861, November 2006.
- [35] G.Poggi, G.Scarpa, J.Zerubia, "Supervised segmentation of remote sensing images based on a tree-structured MRF model," *IEEE Transactions on Geoscience and Remote Sensing*, vol.43, pp.1901-1911, August 2005.
- [36] G.Ferraiuolo, G.Poggi, "A Bayesian filtering technique for SAR interferometric phase fields," *IEEE Transactions on Image Processing*, vol.13, pp.1368-1378, October 2004.
- [37] C.D'Elia, G.Poggi, G.Scarpa, "A tree-structured markov random field model for bayesian image segmentation," *IEEE Transactions on Image Processing*, vol.12, pp.1259-1273, October 2003.
- [38] C.D'Elia, G.Poggi, "Self-organizing codebooks for trellis-coded VQ," *IEEE Signal Processing Letters*, vol.9, pp.404-406, December 2002.
- [39] C.D'Elia, G.Poggi, L.Verdoliva, "Compression of SAR raw data through range focusing and variable-rate trellis-coded quantization," *IEEE Transactions on Image Processing*, vol.10, pp.1278-1287, September 2001.
- [40] G.Poggi, A.R.P.Ragozini, "Tree-structured product-codebook vector quantization," *Elsevier Signal Processing: Image Communication*, vol.16, pp.421-430, January 2001.
- [41] P.L.Dragotti, G.Poggi, A.R.P.Ragozini, "Compression of multispectral images by three-dimensional SPIHT algorithm," *IEEE Transactions on Geoscience and Remote Sensing*, vol.38, pp.416-428, January 2000.
- [42] G.Poggi, A.R.P.Ragozini, L.Verdoliva, "Compression of SAR data through range focusing and variable-rate vector quantization," *IEEE Transactions on Geoscience and Remote Sensing*, vol.38, pp.1282-1289, May 2000.
- [43] G.Gelli, G.Poggi, "Compression of multispectral images by spectral classification and transform coding," *IEEE Transactions on Image Processing*, vol.8, pp.476-489, April 1999.
- [44] G.Poggi, A.R.P.Ragozini, "Image segmentation by tree-structured Markov random fields," *IEEE Signal Processing Letters*, vol.6, pp.155-157, July 1999.
- [45] G.R.Canta, G.Poggi, "Kronecker-product gain-shape vector quantization for multispectral and hyperspectral image coding," *IEEE Transactions on Image Processing*, vol.7, pp.668-678, May 1998.
- [46] G.R.Canta, G.Poggi, "Compression of multispectral images by address-predictive vector quantization," *Elsevier Signal Processing: Image Communication*, vol.11, pp.147-159, December 1997.

- [47] G.Poggi, "Low bit-rate vector quantization with progressive transmission," Wiley European transactions on telecommunications and related technologies, vol.8, pp.171-177, March/April 1997.
- [48] G.Poggi, "Generalized-cost-measure-based address-predictive vector quantization," IEEE Transactions on Image Processing, vol.5, pp.49-55, January 1996.
- [49] G.Poggi, "Applications of the Kohonen algorithm in vector quantization," Wiley European transactions on telecommunications and related technologies, vol.6, pp.191-202, March/April 1995.
- [50] G.Poggi, R.A.Olshen, "Pruned tree-structured vector quantization of medical images with segmentation and improved prediction," IEEE Transactions on Image Processing, vol.4, pp.734-742, June 1995.
- [51] G.Poggi, "Address-predictive vector quantization of images by topology-preserving codebook ordering," Wiley European transactions on telecommunications and related technologies, vol.4, pp.423-434, July/August 1993.
- [52] G.Poggi, "Fast algorithm for full-search VQ encoding," IEE Electronics Letters, vol.29, pp.1141-1142, June 1993.
- [53] L.Izzo, L.Paura, G.Poggi, "An interference-tolerant algorithm for localization of cyclostationary-signal sources," IEEE Transactions on Signal Processing, vol.40, pp.1682-1686, July 1992.
- [54] L.Izzo, L.Paura, G.Poggi, "Optimum threshold diversity reception of NCFSK signals in non-Gaussian noise," IEE Proceedings Part-I, Communications, Speech and Vision, vol.137, pp.13-16, February 1990.

Arxiv

- [1] M.Castelluccio, G.Poggi, C.Sansone, L.Verdoliva, "Land use classification in remote sensing images by convolutional neural networks," arXiv preprint arXiv:1508.00092, August 2015.

Conference papers

- [1] F.Marra, D.Graganiello, L.Verdoliva, G.Poggi, "Do GANs Leave Artificial Fingerprints?," IEEE MIPR - International Conference on Multimedia Information Processing and Retrieval, pp. 506-511, San Jose (USA), march 2019.
- [2] D.Cozzolino, L.Verdoliva, G.Scarpa, G.Poggi, "Nonlocal Sar Image Despeckling by Convolutional Neural Networks," IEEE IGARSS - International Geoscience and Remote Sensing Symposium, pp. 5117-5120, Yokohama (J), July 2019.
- [3] F.Sica, M.Martone, M.Pinheiro, D.Cozzolino, P.Prats-Iraola, G.Poggi, "Exploiting nonlocal filters for high-resolution InSAR DEM generation," IEEE IGARSS - International Geoscience and Remote Sensing Symposium, pp.2192-2195 , Valencia (E), July 2018.
- [4] S.Tabti, L.Verdoliva, G.Poggi, "Sparse-coding adapted to SAR images with an application to despeckling," IEEE IGARSS - International Geoscience and Remote Sensing Symposium, pp.3703-3706 , Valencia (E), July 2018.
- [5] A.De Giorgi, G.Moser, G.Poggi, G.Scarpa, S.B.Serpico, "Very high resolution optical image classification using watershed segmentation and a region-based kernel," IEEE IGARSS - International Geoscience and Remote Sensing Symposium, pp.1312-1315 , Valencia (E), July 2018.
- [6] D.Graganiello, F.Marra, G.Poggi, L.Verdoliva, "Analysis of adversarial attacks against CNN-based image forgery detectors," EUSIPCO - European Signal Processing Conference, pp. 967-971, Rome (I), September 2018.
- [7] D.Cozzolino, G.Di Martino, G.Poggi, L.Verdoliva, "A fully convolutional neural network for low-complexity single-stage ship detection in Sentinel-1 SAR images," IEEE IGARSS - International Geoscience and Remote Sensing Symposium, pp.886-889, Fort Worth (USA), July 2017.
- [8] D.D'Avino, D.Cozzolino, G.Poggi, L.Verdoliva, "Autoencoder with recurrent neural networks for video forgery detection," Electronic Imaging: Media Watermarking, Security, and Forensics 2017, pp. , Burlingame (USA), January 2017.
- [9] M.Castelluccio, C.Sansone, L.Verdoliva, G.Poggi, "Automatically analyzing groups of crashes for finding correlations," 11th Joint Meeting on Foundations of Software Engineering, pp.717-726, August 2017.
- [10] R.Gaetano, D.Cozzolino, L.D'Amiano, L.Verdoliva, G.Poggi, "Fusion of SAR-optical data for land cover monitoring," IEEE IGARSS - International Geoscience and Remote Sensing Symposium, pp.5470-5473, Fort Worth (USA), July 2017.
- [11] D.Cozzolino, F.Marra, G.Poggi, C.Sansone, L.Verdoliva, "PRNU-based forgery localization in a blind scenario," ICIAP - International Conference on Image Analysis and Processing, pp.569-579, Catania (I), 2017.

- [12] D.Cozzolino, G.Poggi, L.Verdoliva, "Recasting residual-based local descriptors as convolutional neural networks: An application to image forgery detection," ACM IHMMSec - Workshop on Information Hiding and Multimedia Security, pp. Philadelphia (USA), June 2017.
- [13] G.Chierchia, D.Cozzolino, G.Poggi, L.Verdoliva, "SAR image despeckling through convolutional neural networks," IEEE IGARSS - International Geoscience and Remote Sensing Symposium, pp.5438-5441, Fort Worth (USA), July 2017.
- [14] M.Castelluccio, G.Poggi, C.Sansone, L.Verdoliva, "Training convolutional neural networks for semantic classification of remote sensing imagery," JURSE - Joint Urban Remote Sensing Event, pp. , Dubai (UAE), March 2017.
- [15] D.Gagnaniello, C.Sansone, G.Poggi, L.Verdoliva, "Biometric spoofing detection by a domain-aware convolutional neural network," SITIS - International Conference on Signal-Image Technology and Internet-Based Systems, pp.193-198 , Naples (I), November 2016.
- [16] F.Marra, G.Poggi, C.Sansone, L.Verdoliva, "Correlation clustering for PRNU-based blind image source identification," IEEE WIFS - International Workshop on Information Forensics and Security, pp.1-6 , Abu Dhabi (UAE), December 2016.
- [17] G.Masi, R.Gaetano, G.Poggi, G.Scarpa, "A ground truth design tool for multiresolution images," IEEE IGARSS - International Geoscience and Remote Sensing Symposium, pp.4999-5002, Milan (I), July 2015.
- [18] F.Marra, G.Poggi, F.Roli, C.Sansone, L.Verdoliva, "Counter-forensics in machine learning based forgery detection," Proceedings of SPIE, Media Watermarking, Security and Forensics, San Francisco (USA), February 2015.
- [19] F.Marra, G.Poggi, C.Sansone, L.Verdoliva, "Evaluation of residual-based local features for camera model identification," International Workshop on Recent Advances in Digital Security: Biometrics and Forensics, pp.11-18, Genoa (I), September 2015.
- [20] D.Gagnaniello, G.Poggi, G.Scarpa, L.Verdoliva, "SAR despeckling based on soft classification," IEEE IGARSS - International Geoscience and Remote Sensing Symposium, pp.2378-2381, Milan (I), July 2015.
- [21] D.Cozzolino, G.Poggi, L.Verdoliva, "Splicebuster: A new blind image splicing detector," IEEE WIFS - International Workshop on Information Forensics and Security, pp.1-6 , Rome (I), December 2015
- [22] G.Masi, R.Gaetano, G.Poggi, G.Scarpa, "Superpixel-based segmentation of remote sensing images through correlation clustering," IEEE IGARSS - International Geoscience and Remote Sensing Symposium, pp.1028-1031, Milan (I), July 2015.
- [23] L.D'Amiano, D.Cozzolino, G.Poggi, L.Verdoliva, "Video forgery detection and localization based on 3D Patchmatch," IEEE ICME - International Conference on Multimedia and Expo Workshops, Turin (I), June 2015.
- [24] L.Verdoliva, D.Cozzolino, G.Poggi, "A feature-based approach for image tampering detection and localization," IEEE WIFS - International Workshop on Information Forensics and Security, pp.149-154, Atlanta (USA), December 2014.
- [25] D.Gagnaniello, G.Poggi, C.Sansone, L.Verdoliva, "Contact lens detection and classification in iris images through scale invariant descriptor," SITIS - International Conference on Signal-Image Technology and Internet-Based Systems, pp.560-565, Marrakech (Morocco), November 2014.
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