

# GAMBA PAOLO ETTORE

## CURRICULUM VITAE

Paolo Gamba is currently Full Professor of Telecommunications at the University of Pavia, Italy. He received the Laurea degree in Electronic Engineering “cum laude” from the University of Pavia, Italy, in 1989, and the Ph.D. degree in Electronic Engineering from the same University in 1993. He is a Fellow of IEEE, and from 2009 to 2013 he has served as Editor-in-Chief of the IEEE Geoscience and Remote Sensing Letters. He has been member of the AdCom and Chapter Committee Chair for the IEEE Geoscience and Remote Sensing Society from 2014 to 2016, Latin American activity Liaison in the same period, has served in 2016 as Vice President for Professional Activities, and is currently Executive Vice President of the same Society.

He has been the organizer and Technical Chair of the biennial GRSS/ISPRS Joint Workshops on “Remote Sensing and Data Fusion over Urban Areas” since 2001 until 2015. He also served as Technical Co-Chair of the 2010 and 2015 IEEE Geoscience and Remote Sensing Symposium, respectively in Honolulu, Hawaii, and Milan, Italy, and is meant to serve as Technical Co-Chair for the same conference in 2020, too.

He has been Chair of Technical Committee 7 “Pattern Recognition in Remote Sensing” of the International Association for Pattern Recognition (IAPR) from October 2002 to October 2004 and Chair of the Data Fusion Committee of the IEEE Geoscience and Remote Sensing Society from October 2005 to May 2009.

He has been the Guest Editor of special issues of IEEE Transactions on Geoscience and Remote Sensing, IEEE Journal of Selected Topics in Earth Observation and Applied Remote Sensing, ISPRS Journal of Photogrammetry and Remote Sensing, International Journal of Information Fusion, Journal of Applied Remote Sensing, and Pattern Recognition Letters on the topics of Urban Remote Sensing, Remote Sensing for Disaster Management, Pattern Recognition in Remote Sensing Applications, Data Fusion, and Hyperspectral Urban Remote Sensing.

He has been invited to give keynote lectures and tutorials in several occasions about urban remote sensing, data fusion, EO data and risk management. He published more than 130 papers in international peer-review journals and presented nearly 290 research works in workshops and conferences.

### Research Interests

- a) Design of efficient algorithms to analyse EO data and extract feature to characterize urban areas and in general human settlements at multiple spatial scales and spectral wavelengths.
- b) Design of data fusion techniques to exploit information coming from multiple EO and in situ data sources for environmental risk models at local, regional and global scale.
  - feature extraction, selection and combination procedures to evaluate spectral, spatial and temporal characteristics of each available data source for their comparison (e.g. change detection) or synergetic use (e.g. multivariate regression);
  - fusion of features by means of algorithms able to reconcile multiple features from both homogeneous and heterogeneous data sources (e.g. 2D/3D, vector and raster, ...) and/or different scales via inference or aggregation schemes.
- c) Development of novel tools to extract quantitative parameters from remotely sensed data and to link the extracted information to risk and environmental models.
  - classification, mapping and geospatial data fusion procedures for the retrieval of parameters and information layers essential to understand the above mentioned processes
  - signal and image processing in high dimensional spaces, applications in very high resolution remote sensing.

### Supervision of MSc, PhD and Post Doc students

a) *M.Sc. Thesis evaluation (>50)*

b) *Ph.D. students (10: 9 defended, 1 on-going)*

### c) Post-docs (2 on-going)

#### Publications Metrics

SUMMARY	
Books	1
Chapters in books	19
Papers in books	16
Special Issues edited in int. journals	19
Papers in international peer-reviewed journals	136
Papers in national peer-reviewed journals	5
International conference papers	286
National conference papers	8

BIBLIOMETRY		
	ResearcherID	Scopus
Number of cited papers	220	331
Total number of citations	2227	3356
h-index	26	30

#### Editorial activities

##### a) Editorial Board

- **Editor-in-Chief**, IEEE Geoscience and Remote Sensing Letters (three years assignment for 2009-2011, confirmed for two more years until the end of 2013)
- **Associate Editor**, IEEE Trans. on Geoscience and Remote Sensing (since 2009)
- **Associate Editor**, IEEE Geoscience and Remote Sensing Letters (since 2006)
- **Associate Editor**, International Journal of Information Fusion (2006-2009)
- **Guest Editor**, IEEE Journal on Selected Topics in Applied Earth Observations and Remote Sensing (since 2009)
- **Member of the Editorial Board**, European Journal of Remote Sensing (formerly, Italian Journal of Remote Sensing)
- **Member of the Editorial Board**, International Journal of Image and Data Fusion (2013-2015)
- **Member of the Editorial Advisory Board**, ISPRS Journal of Photogrammetry and Remote Sensing (since Jan. 2013)

#### Professional membership

- Fellow of **IEEE** (Institute of Electrical and Electronic Engineers)
- Member of **IAPR** (International Association for Pattern Recognition)
- Member of **AIT** (Associazione Italiana Telerilevamento)