

Curriculum vitae

PERSONAL INFORMATION Andrea Garzelli

- Vuniversity of Siena, Department of Information Engineering and Mathematics
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EDUCATION	
1995	Ph.D. degree in Computer Science and Telecommunication Engineering – University of Florence, Italy
1991	"Laurea" degree (summa cum laude) in Electronic Engineering – University of Florence, Italy
1991	National qualification for the engineer profession
ACADEMIC POSITION	
2017	National research accreditation as Full Professor of Telecommunications
2001-present	Associate Professor of Telecommunications, Department of Information Engineering and Mathematics, University of Siena
1995-2001	Assistant Professor of Telecommunications, Faculty of Engineering, University of Siena
TEACHING EXPERIENCE	
2012-present	'Statistical Signal Processing', M.Sc. in Electronics and Communications Engineering, University of Siena
2015-present	'Fundamentals of Telecommunications', B.Sc. in Computer Science and Information Engineer- ing, University of Siena
2002-2015	Tutor of five PhD students - Information Engineering PhD course, University of Siena
1994-2017	'Digital Signal Processing', 'Signal Theory', 'Electrical Communications', 'Remote Sensing', University of Siena
SERVICE AND ORGANISATION	
	International
2015-present	Associate Editor for the journal IEEE Transactions on Geoscience and Remote Sensing
2013-2015	Finance Chair of the IEEE International Geoscience and Remote Sensing Symposium, IGARSS 2015
2001-present	Member of the Image Analysis and Data Fusion Committee (formerly Data Fusion Committee) of the IEEE Geoscience and Remote Sensing Society
	National
2016-present	Coordinator of the Quality Assurance Committee (PQA) of the University of Siena
2002-2009	Program Coordinator of both graduate and post-graduate courses in Telecommunication Engineering at the University of Siena
2015-present	Committee Member of the PhD in "Information Engineering and Science" at the University of Siena, Italy.



AWARDS AND RECOGNITION 2004 IEEE Geoscience and Remote Sensing Society Letters Prize Paper Award for the paper "A Global Quality Measurement of Pan-Sharpened Multispectral Imagery" 2006 Senior Member of the IEEE 2014 Best Reviewer of the IEEE Transactions on Geoscience and Remote Sensing 2014-2015 Outstanding Information Research Foundation (IRF) Book publication award for the book "Remote Sensing Image Fusion" (CRC Press)

Mother tongue Italian

Other languages

nguages	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C2	C1	C2	C2
French	B2	C1	B2	B1	B2

Levels: A1 and A2: Basic user – B1 and B2: Independent user – C1 and C2: Proficient user Common European Framework of Reference for Languages

RESEARCH TOPICS

- Image analysis and processing
- Image classification and detection
- Remote sensing image fusion
- Pansharpening
- SAR change detection

RESEARCH PROJECTS

Research unit coordinator

	Research unit coordinator
2019-2020	Satellite images for land-use applications (Tuscany Region Administration through Consorzio LaMMA)
2015-2018	TACTIC, Screening of high-resolution SAR images for medium and large scale scenarios (IDS-SpA, Italian Ministry of Defense)
2014-2017	SOAR-ASI 5245, COSMO-SkyMed/RADARSAT-2 Initiative, (Italian Space Agency, Canadian Space Agency)
2013-2015	CAESARIS, Cognitive Airborne multisEnsor System for Aerial Reconnaissance Intelligence and Surveillance, (EU-FP7-SME, 2013-2015)
2012-2013	KLEAN, Knowledge-based EFB for green flight trajectory decision aid (EU-Clean Sky Joint Technology Initiative, 2012-2013)
2012-2013	CleanSky, Test ed ottimizzazione della catena di processing per la rivelazione e la caratteriz- zazione di fenomeni meteorologici in radar avionici in banda X, (SELEX-Galileo S.p.A., 2013)
2009-2013	SISAR - Feasibility study of an automatic interpretation system of SAR images (IDS-SpA, Italian Ministry of Defense)

- 2010-2012 Development and validation of multitemporal image analysis methodologies for multirisk monitoring of critical structures and infrastructures (ASI COSMO/SkyMed, Announcement of Opportunity for CSK data, 2010-2012)
- 2010-2012 LOTHAR-FATT, Feasibility study of an adaptive Over-The-Horizon HF radar for the surveillance of the Mediterranean Sea (Italian Ministry of Defense, 2008-2010)

2006-2007 Development and validation of innovative data fusion techniques for environmental remote sensing (PRIN, MIUR, Italian Ministry of University and Research)

- 2004-2005 LOTHAR, Pre-feasibility study of an adaptive Over-The-Horizon HF radar for the surveillance of the Mediterranean Sea (Italian Ministry of Defense)
- 2003-2003 ECOSAR (ASI, Fundamental Research)
- 2001-2003 Development and validation of a sea surface fractal model (ESA-Envisat AO-161 Announcement of Opportunity for the exploitation of Envisat data)
 - 2001 ECOSAR, Processing and classification of optical and SAR data for environmental risk management (ASI, Italian Space Agency, Cosmo-Skymed Program)



2001-2002	Experimentation of integrated methodologies for ocean color analysis from MERIS data (ASI,
Italian Space Agency, Fundamental Research)	

- 1997-1999 SEEDS, Simulation Environment for the Evaluation of Distributed traffic control Systems (ES-PRIT Project EP 22691)
 - 1995 Development of integrated methods of agro-ecological classification by means of remote sensing data for natural resources management (ASI, Italian Space Agency)

Participant

- 2011-2015 OPTIMA, Metodologie avanzate per l'analisi, l'integrazione e l'ottimizzazione dei prodotti di livello 1 e 2 della missione PRISMA (ASI Studi Scientifici a Supporto della Missione PRISMA, 2011-2015)
- 2014-2015 Studio e sviluppo di algoritmi per la sorveglianza automatica (CoMETA S.p.A.)

2006-2007 Distributed image coding for remote sensing applications (ESA, European Space Agency) 2001-2002 Data Fusion (PRIN, MIUR, Italian Ministry of University and Research)

2001-2002 D

- 2001-2002 System for SAR image interpretation (ASI, Italian Space Agency, Cosmo-Skymed Program)
 2000 Watermarking techniques for copyright protection and authentication of remote sensing images accessible from public and private computer networks, ASI, Italian Space Agency, 2000)
 - AVANTI, AdaptiVe and Adaptable iNteractions for multimedia Telecommunications applications (ACTS EU Project)
 - HIPS, Hyper-Interaction within Physical Space, (ESPRIT EU Project)
 - ECHOES, EduCational Hypermedia On-linE System, (DGXII EU Project)

PUBLICATIONS

Complete list Google Scholar Profile

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Bibliometrics (September 2020)

	Google Scholar	Scopus
Number of publications	233	173
Citations	6326	4774
2019 citations	826	757
Hirsch index	32	30