



PERSONAL INFORMATION

Name **SGRENZAROLI MATTEO**

Nationality Italian

Date of birth 30/03/1972

WORK EXPERIENCE 1

- Date from 01/07/ 2007 – to today
- Name and address of employer Gexcel s.r.l –Viale Branze 43 – 25123 Brescia
 - Type of business or sector Spin off company of University of Brescia
 - Occupation or position held R&D Software Development director
- Main activities and responsibilities Advanced Laser Scanning software solution

WORK EXPERIENCE 2

- Date from 01/07/ 2011 – to today
- Name and address of employer Topotek s.r.l – Via Oslavia, 24
20900 Monza
 - Type of business or sector High -tech company
 - Occupation or position held General administrator
- Main activities and responsibilities Advanced Laser Scanning application and Remote-sensing

WORK EXPERIENCE 3

- Date from 2006 – to today
- Name and address of employer University of Brescia – Engineering Faculty
 - Type of business or sector
 - Occupation or position held expert on the subject
- Main activities and responsibilities teaching support: advance survey techniques: laser survey technologies- photogrammetry

WORK EXPERIENCE 4

- Date from 01/07/ 2004 -01/09/2006
- Name and address of employer Topotek 2D 3D s.r.l –Viale Europa 46 – 25123 Brescia
 - Type of business or sector High -tech company
 - Occupation or position held General administrator
- Main activities and responsibilities Advanced Laser Scanning application and Remote-sensing

WORK EXPERIENCE 5

- Date from 01/04/2003 – to 01/07/2004
- Name and address of employer INN.TEC. srl –Via Branze, 38 – 25123 Brescia
 - Type of business or sector Consortium for Technology Transfer and Innovation technology Brescia

- Occupation or position held Technical Consultant
- Main activities and responsibilities Responsible for laser scanner and remote sensing techniques and relationship with European Commission contracts

WORK EXPERIENCE 6

- Date from 1/09/2001 – to 30/04/2004
- Name and address of employer 3D Veritas srl -Sesto Calende (VA) Italy
 - Type of business or sector Software house for 3D laser data software spin-off from European Commission-Joint Research Centre
- Occupation or position held Project Manager
- Main activities and responsibilities Responsible for laser scanner software development and marketing

WORK EXPERIENCE 7

- Date from 1999 to 2001
- Name and address of employer Joint Research Centre – Space Application Institute -Global Vegetation Monitoring– EC) - Ispra (Italy)
 - Type of business or sector Radar Remote Sensing Research
- Occupation or position held PhD grant
 - Marie Curie Research Training Grants position within the European Commission TREES (Tropical Ecosystem Environment Observation by Satellites) project and the international initiative GRFM (Global Rain Forest Mapping) launched in 1995 by the National Space Development Agency of Japan NASDA.
 - Research Proposal: “The Exploitation of JERS-1 Radar Mosaic for Tropical Deforestation and Degradation Monitoring – Comparison with Optical Satellite Data”.
 - Data set used: GRFM Synthetic Aperture Radar (JERS-1) mosaic of the South America tropical rain forest, Landsat TM images.
 - Development of software tool for image mosaicing and registration, forest map production, accuracy assessment of results and results upscaling from coarse to high resolution data-sets (programming languages used: IDL, ENVI, IMAGINE, ArcView).
 - Field work at IMPE Forest Reserve - Manaus (Brasil)
- Main activities and responsibilities

WORK EXPERIENCE 8

- Date 1997
- Name and address of employer Joint Research Centre – Space Application Institute -Global Vegetation Monitoring– EC) - Ispra (Italy)
 - Type of business or sector Radar Remote Sensing Research
- Occupation or position held Consultant
- Main activities and responsibilities Consultant on SEARRI project (South East Asia Radar Rice Investigation) for monitoring rice paddies in SE Asia, using data analysis of radar satellite images.
Project pilot phase co-ordination: development of software tools for ERS-SAR images multi-temporal analyses for rice paddies mapping, ERS-SAR imagery data-et selection for South East Asia coverage (programming languages used: IDL, ENVI)

MAIN EDUCATION AND TRAINING

- Date 2004
- Name and type of organization providing education and training WAGENINGEN AGRICULTURAL UNIVERSITY (The Netherlands).
- Principal subjects/occupational PhD student

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| <ul style="list-style-type: none"> skills covered • Title of qualification awarded | <p>PhD in TROPICAL FOREST MAPPING AT REGIONAL SCALE USING THE GRFM SAR MOSAICS OVER AMAZON IN SOUTH AMERICA</p> |
| <ul style="list-style-type: none"> • Level in national classification) | <p>PhD</p> |
| <ul style="list-style-type: none"> • Date | <p>1997</p> |
| <ul style="list-style-type: none"> • Name and type of organization providing education and training | <p>POLITECNICO di MILANO - Milan (Italy)</p> |
| <ul style="list-style-type: none"> • Principal subjects/occupational skills covered | <p>Master degree in Environmental Engineering (5 years degree) Specialization: territory survey, remote sensing, photogrammetric and geodesy</p> |
| <ul style="list-style-type: none"> • Title of qualification awarded | <p>Environmental Engineer</p> |
| <ul style="list-style-type: none"> • Level in national classification) | <p>graduate</p> |

PERSONAL SKILLS AND COMPETENCES

Acquired in the course of life and career but not necessarily covered by formal certificates and diplomas.

MOTHER TONGUE ITALIAN

OTHER LANGUAGES

- | | |
|---|---|
| <ul style="list-style-type: none"> • Reading skills • Writing skills • Verbal skills | <p>ENGLISH</p> <p>Good</p> <p>Good</p> <p>Good</p> |
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SOCIAL SKILLS AND COMPETENCES

Living and working with other people, in multicultural environments, in positions where communication is important and situations where teamwork is essential (for example culture and sports), etc.

- Member of research and design work group in international research centre
- Project management for developing team in European Commission and international projects
- Training activities for private companies, research institutes, public territorial and international agencies and Universities
- Member of scientific expedition of glacier monitoring in Everest and Central Africa Areas - years 1998-2003-2008
- Training activity for alpinists, ski alpinism

TECHNICAL SKILLS AND COMPETENCES

With computers, specific kinds of equipment, machinery, etc..

Software and Hardware

- Operating systems: UNIX system, Dos,
- Remote sensing analysis development toolkit and processing software: IDL, ENVI, IMAGE,
- GIS packages: ArcView
- Software laser data processing: JRC 3D Reconstructor (by Gexcel), FARO Scene RiSCANPro, PointCloud, by Kubit, EdgeWise, Verity by ClearEdge, Orbit
- Software for image processing: PhotoPlan by Kubit. Photo-modeler, Zephyr
- Terrestrial laser usage: Riegl, Leica HDS, Z&F, FARO, Optech Good level user of: WinWord, Excel, PowerPoint, CAD systems, Camtasia, Windows Visio, Windows Project
- High level user of software for Remote sensing software and for Laser data processing.

Project management developing tools

- GITLab
- RedMine

PUBLICATION

Peer reviewed publications

A moving 3D laser scanner for automated underbridge inspection, Marco Tarabini *, Hermes Giberti, Silvio Giancola, Matteo Sgrenzaroli, Remo Sala, Federico Cheli, Machines —Access Engineering Journal, in press

Sgrenzaroli M., A. Baraldi, G.D. De Grandi, H. Eva and F. Achard, A Novel Approach to the Classification of Regional Scale Radar Mosaics for Tropical Vegetation Mapping, IEEE Transactions on Geoscience and Remote Sensing, 2004

Eva, Belward, de Miranda, di Bella , Gonds, Huber, Jones, Sgrenzaroli, Fritz, A land cover map of South America, Global Change Biology 10, 731–744, 2004.

Sgrenzaroli M., A. Baraldi, G.D. De Grandi, H. Eva and F. Achard., Forest Degradation Assessment in South America form Landsat TM Images Using a Contextual Clustering Technique for Image Labelling, IEEE Transactions on Geoscience and Remote Sensing, August 2002, vol. 40

Sgrenzaroli M., G.D. De Grandi, H. Eva and F. Achard, 2001, Tropical Forest Cover Monitoring Estimates and Validation form the GRFM JERS-1 Radar Mosaics Using Wavelets Zooming Technique , International Journal of Remote Sensing, 2002, vol. 23, no. 7, 1329–1355.

Sgrenzaroli M., H. Eva and F. Achard, 2000, Assessment of resolution L-band radar mosaics for regional forest change detection in lowland tropical forests of South America, Proceedings of the Conference on Remote Sensing and Forest Monitoring, , T. Zawila-Niedzwiecki, M. Brach (Eds.), EUR 19530/EN (2000) 208-215, European Commission, Luxembourg.

Carcano G. and M. Sgrenzaroli, 1999, Telerilevamento da satellite con tecnologia SAR: Individuazione delle risaie nel Sud-Est Asiatico-, Rivista Italiana di Telerilevamento n. 14/15 Sept. 98-Gen. 99.

Books

M. Sgrenzaroli, G. Vassena (2007) - "Tecniche di rilevamento tridimensionale tramite laser scanner", Starrylink editions, ISBN: 978-88-89720-73-8 .

"Manuale delle investigazioni sulla scena del crimine" (a cura di) Donatella Curtotti - Luigi Saravo 2013 - pp. XXVIII-1096 - ISBN 978•88•3482900•4 - G. Giappichelli Editore

Presentations at Scientific conferences

Carcano G., M. Sgrenzaroli and G. Lechi, 1999, Communication at the first National Conference of Scientific Association for Territorial and Environmental Information: "Telerilevamento da satellite con tecnologia SAR: individuazione delle risaie nel Sud Est Asiatico"

Carcano G., G. Casartelli, M. Sgrenzaroli, R. Sgrenzaroli, A. Smiraglia and G. Vassena, 1999, Communication at 8° Convegno Glaciologico Italiano Bormio 9-12 settembre 1999: "L'impiego di strumentazione satellitare GPS in modalità RTK, per il calcolo delle variazioni di massa dei ghiacciai"

Sgrenzaroli M., F. De Grandi, and M. Simard, 1999, Communication at GRFM Meeting , INPE Brazil Nov. 8-12, 1999: "Evaluation of the GRFM radar mosaic potential for quantitative assessment of deforestation in Amazonia"

Sgrenzaroli M., Vegetation and Classification: Global Rain Forest Mapping project: Processing steps and flow of operations" lecture at CCG - SAR Principles and Applications Oberpfaffenhofen, 12 November 30, 2009

Sgrenzaroli M. "Gexcel software solutions: a complete suite for TLS-Challenge" , DVW-Seminar "Terrestrisches Laserscanning – TLS 2011 mit TLS-Challenge" on December 1st and 2nd in Fulda, Germany

Additional information

- 1998 Changry Nup scientific expedition for glacier survey. Nepal Kumbu Valley Everest - EV K2 CNR
- 2003 HELP scientific expedition for laser scanner glacier survey. Nepal Kumbu Valley Everest - University of Brescia. First laser scanner survey of the "Ice Fall Glacier" -Everest
- 2005 Ruwenzori scientific expedition for laser scanner glacier survey. Uganda "Biasin – Alpinism Prize" – 1998 (Italian Alpine Club – Verona
- Favorites sports: Mountain climbing, Skiing, Running.

ANNEXES NONE