

# Fabio Remondino – Curriculum vitae

## Personal data

**First name** Fabio  
**Surname** Remondino  
**E-mail**  
**Birth**  
**Nationality**  
**Sex**

## Professional interests

Photogrammetry  
Range Sensors  
Multi-sensor integration  
3D Modelling  
Remote sensing

## Actual position

Scientific researcher  
3D Optical Metrology (3DOM)  
B. Kessler Foundation (FBK), Trento, Italy – <http://www.fbk.eu>

## Education

- 2007-2010: **Post-Doc**  
Smart and Optical Integrated Interface (SOI)  
B. Kessler Foundation (FBK), Trento, [Italy – http://www.fbk.eu](http://www.fbk.eu)
- April 2006: **Ph. D. Degree**  
Institute of Geodesy and Photogrammetry  
ETH Zurich, Switzerland  
Title: Image-based modeling for object and human reconstruction.  
ETH Thesis No 16562, 174 pages
- December 1998: **Environmental Engineering**  
Polytechnic of Milan, Italy  
Thesis title: Innovative automation aspects in aerial photogrammetry
- July 1993: **High school Degree**  
G. Ferraris Scientific High School

Varese, Italy

### Teaching

- 2002-2007: **Institute of Geodesy and Photogrammetry, ETH Zurich, Switzerland**
  - Digital Photogrammetry I
  - Digital Photogrammetry II
  - Close-range Photogrammetry
  - Photogrammetry and Machine Vision
  - Industrial Measurements

### Work experiences

- 2007-: **Scientific researcher**  
B. Kessler Foundation (FBK), Trento, Italy
  
- 1999-2007: **Research assistant**  
Institute of Geodesy and Photogrammetry  
ETH Zurich, Switzerland
  
- October-December 1997  
**Software development**  
GIS Italia, Milan, Italy

### Languages (1-5)

	Understanding	Oral	Written
Italian (native)	5	5	5
English	4	4	4
German	4	3	3
Spanish	4	3	3
French	2	1	1

### Stages and summer schools

- September 2009: **University of Newcastle, UK**  
School of Civil Engineering & Geosciences, Photogrammetry and Laser Scanning Research Team, Newcastle upon Tyne, UK
  
- September 2006: **National Research Council (CNR) of Italy**  
Institute of Technologies Applied to Cultural Heritage (ITABC), Rome, Italy
  
- April - May 2005: **National Research Council (NRC) of Canada**  
Visual Information Technology Group, Ottawa, Canada

- 25-29 June 2001: **EPSRC/British Machine Vision Summer School in Computer Vision**, University of Surrey, UK

6-8 September 2000: **Summer School on Shape in Computer Vision and Graphics**, ETH Zurich, Switzerland

**Organized scientific events**

- SPIE Optics+Photonics “Videometrics, Range Imaging and Applications X”, 2-6 August 2009, San Diego (CA), USA
- CAA 2009 - Special Session on Reality-based modeling and visualization of large and complex archaeological sites, 22-26 March 2009, Williamsburg, Virginia, USA
- 3<sup>rd</sup> ISPRS International Workshop “3D-ARCH’09 - 3D Virtual Reconstruction and Visualization of Complex Architectures”, 25-28 February 2009, Trento, Italy
- 6<sup>th</sup> International ARIDA (Association for Real Time Imaging and Dynamic Analysis) meeting “Innovation in 3D measurement, modeling and visualization”, Bruno Kessler Foundation (FBK), Trento, Italy, 25-26 February 2008
- 2<sup>nd</sup> ISPRS International Workshop “3D-ARCH’07 - 3D Virtual Reconstruction and Visualization of Complex Architectures”, 12-13 July, 2007, ETH Zurich, Switzerland
- 8<sup>th</sup> Conference on Optical 3D Measurement Techniques, 9-12 July, 2007, ETH Zurich, Switzerland
- SPIE Electronic Imaging “Videometric IX”, 28 January-1 February 2007, S.Jose (CA), USA
- 1<sup>st</sup> ISPRS International Workshop “3D-ARCH’05 - 3D Virtual Reconstruction and Visualization of Complex Architectures”, 22-24 August, 2005, Mestre-Venice, Italy
- 4<sup>th</sup> International ARIDA (Association for Real Time Imaging and Dynamic Analysis) meeting “3D Measurement, Modeling and Visualization by New Digital Sensors”, ETH Zurich, 15-16 August 2005
- ISPRS International Workshop on “Processing and Visualization using High-Resolution Imagery”, 18-20 November 2004, Pitsanulok, Thailand
- 6<sup>th</sup> Conference on Optical 3D Measurement Techniques, 22-25 September 2003, Zurich, Switzerland
- ISPRS International Workshop on “Visualization and Animation”, 24-28 February 2003, Tarasp-Vulpera, Switzerland

**Organized and held summer**

- Summer School on Photogrammetry, Computer Vision and Laser

### **schools and tutorials**

- Scanning, 12-16 April 2010, Udine, Italy
- International Summer School for Cultural Heritage Documentation, 22-27 September 2009, Merida, Spain
- International Summer School on "The Archaeology of Mountain Landscape", 20-28 July 2009, Pannone di Val Gresta (Trento), Italy
- Italian School of Virtual Archaeology, 6-17 July 2009, Mastercampus di Ca' Tron, Roncade (Treviso), Italy
- International Summer School "3D Modeling in Archaeology and Cultural Heritage 2009", 15-18 June 2009, Trento, Italy
- Post-Graduate School Course "Photogrammetry and Laser scanning in Earth Sciences", 11-15 May 2009, Padua, Italy
- Post-Graduate School "Imaging and Modelling", March 19-25, 2009, Volterra, Italy
- Graduate School Course in Geomatics 2008, September 15-18, 2008, Helsinki, Finland
- International Summer School "3D Modeling in Archaeology and Cultural Heritage 2008", 9-14 May 2008, Ascona, Switzerland
- International School in Archaeology - 'Exploring Landscape Heritage', 27 November - 2 December 2006, Campiglia Marittima, Italy
- ISPRS International Summer School "Digital Recording and 3D Modeling", 24-29 April 2006, Aghios Nikolaos, Crete, Greece
- ISPRS International Summer School "Advances in Medical Imaging", 24-29 April 2006, Aghios Nikolaos, Crete, Greece
- UNESCO Tutorial for sites managers on "Space technologies to support the conservation of natural and cultural sites", 25-27 November 2005, Campeche, Mexico

### **Educational web portal**

- Heritage 3D (<http://www.heritage3D.org>)
- Architectural Image-Based Modeling ([www.map.archi.fr/aibm](http://www.map.archi.fr/aibm))

### **Scientific committees**

- ISPRS Commission V Symposium "Close-Range Image Measurement Techniques", 22-24 June 2010, Newcastle, UK
- 3<sup>rd</sup> International Conference on Remote Sensing in Archaeology, 17-21 August 2009, Tamil Nadu - Tiruchirappalli, India
- 9<sup>th</sup> Conference on Optical 3D Measurement Techniques, 1-3 July 2009, Vienna, Austria
- DMACH 2008 - Digital Media and its Applications in Cultural Heritage - 3-6 November, 2008, Petra University, Amman, Jordan

- XXI<sup>st</sup> ISPRS congress, 3-11 July 2008, Beijing, China
- 2<sup>nd</sup> ISPRS workshop BenCOS 2007 - Towards Benchmarking Automated Calibration, Orientation and Surface Reconstruction from Images, June 2007, Minneapolis, MN, USA (within CVPR 07)
- ISPRS Commission V Symposium "Image Engineering and Vision Metrology", 25-27 September 2006, Dresden, Germany
- 8<sup>th</sup> International Symposium on the 3-D Analysis of Human Movement, 31 March - 2 April 2004, Tampa, Florida, USA

## Awards

- VAST Best Paper Award for the article "Multi-resolution modeling of complex and detailed Cultural Heritage", 9th Int. Symposium on Virtual Reality, Archaeology and Cultural Heritage (VAST 2008), Braga, Portugal, December 2008
- VSMM Best Paper Award for the article "A multi-resolution methodology for archaeological survey: the Pompeii Forum", 14th Int. Conference on Virtual Systems and MultiMedia (VSMM 2008), Limassol, Cyprus, October 2008
- E.H. Thompson Award for the paper "Photogrammetric Reconstruction of the Great Buddha of Bamiyan, Afghanistan", The Photogrammetric Record, Vol.19(107), pp. 177-199, September 2004
- ISPRS Young Authors Award for the paper "Image Sequence Analysis for Human Body Reconstruction" - ISPRS Commission V Symposium, Corfu, Greece, September 2002
- Best Poster Award for the poster "Character Animation and Understanding from Sequences of Images" - EPSRC/British Machine Vision Summer School in Computer Vision, University of Surrey, UK, June 2001

## Projects

### Large projects:

- 2009-2010: Automated image orientation – TU Milan (Italy) funding

The collaborative project aims at the realization of a reliable and precise procedure for the automatic orientation of markerless terrestrial images for the automated 3D documentation and modeling of Cultural Heritage at various scales.

- 2007-2010: "DITECH – Digital Techniques for the Conservation and Restoration of Cultural Heritages" – Autonomous Province of Trento (Italy) funding

DITECH aims at the development of (automated) methodologies and

guidelines for the detailed, complete and accurate documentation, monitoring, digital conservation and restoration of Cultural Heritage. Multiple sensors and technologies are employed, developing a reliable methodology for their possible integration and use.

- 2007-2009: Digital documentation of dinosaur footprints using photogrammetry and laser scanners – Autonomous Province of Trento (Italy) funding

The project aims at the development of a reliable procedure to survey and model dinosaur footprints at the mm resolution.

- 2007-2009: 3D Documentation and modeling of the civil forum in Pompei, Italy – ARCUS funding

Project in collaboration with Scuola Normale of Pisa and Polytechnic of Milan, Italy, which aims at (i) the complete and detailed 3D documentation of the complex forum inside the archaeological area of Pompei and (ii) the linking of the virtual model to the existing archaeological database. The modeling is performed at different scales, from aerial to terrestrial data and integrating different surveying technologies and sensors.

- 2007-2008: 3D Reconstruction of the Great Inscription of Gortyna, Crete – Autonomous Province of Trento (Italy) funding

The project aims at the digital documentation of the longest epigraphic text (8 meters with 2-3 mm depth) of the Greek civilization using multiple techniques and resolutions. The derived computer model is used for physical replica purposes, structural and conservative studies as well as virtual visit of the heritage.

- 2007-2008: Development of Geographic Information Systems at the Acropolis of Athens – EU and Government of Greece funding

The project aims at the 3D documentation of the whole Acropolis area using multiple techniques and sensors, for the final realization of scientific infrastructures needed for current or future restoration planning.

- 2006-2010: Pava Project - archaeological excavation, large scale geophysical survey, remote sensing and 3D documentation of late antique and early middle-aged landscapes in the Asso valley, Siena (Italy) – Public (local municipality) and private (Pava Foundation) funding

In collaboration with the University of Siena, the goal is the development of a low cost and reliable procedure for the constant

documentation and monitoring of the excavation area of Pava (Siena, Italy) with terrestrial, helicopter and airborne data.

- 2005-2009: 3D-ARCH – 3D Documentation of complex architectures - Autonomous Province of Trento (Italy) funding

In collaboration with NRC Canada, the project aims at the development of a reliable procedure for the 3D modeling of complex architectures like medieval castles. The derived 3D models are then visualized inside GIS environments for further studies and analysis.

- 2004-2006: EPOCH (Excellence in Processing Open Cultural Heritage) - EU funding

The EU Network of Excellence EPOCH aims for providing and developing tools and technologies for cultural heritage professionals. A pipeline, covering all aspects from data capture, processing and presentation, was defined. Another important task is the initiation of joint research projects.

- 2001-2007: 3D modeling and visualization of the Bamiyan valley (Afghanistan) and its standing Buddhas - ETH internal grant project

In March 2001 the Taleban militia destroyed the colossal Buddha statues of the Bamiyan valley, Afghanistan. The ETH project aims at the documentation of the entire valley from satellite imagery, up-to-date cartography generation (1:50000), GIS production and 3D modeling of the lost Buddha monument (which can serve as basis for a physical reconstruction of the statue in situ).

- 2000-2004: C.A.U.S.E. (Character Animation and Understanding from SEquence of images) - ETH internal grant project

The CAUSE project deals with the reconstruction of complete 3D animation models of people and extraction of information about their motion characteristics from video sequences or existing movies

#### Small projects:

- 2009: 3D modeling of the “Tre Cime di Lavaredo”, Dolomites, Italy – University of Pavia (Italy) funding
- 2009: Multi-resolution 3D documentation of the UNESCO Maya site in Copan (Honduras) – US National Endowment for the Digital Humanities grant
- 2009: Multi-sensor and multi-spectral 3D documentation of the UNESCO Etruscan Necropolises of Tarquinia, (Italy) – FBK

internal funding

- 2007: 3D modeling and physical replica of the A. Escher's statue in Zurich (Switzerland) – Credit Suisse funding
- 2006: 3D modeling and documentation of the Flamina archaeological area in Rome (Italy) – Public institutions funding
- 2006: Evaluation of landslide potential in the Tambo region (Ecuador) – Public institutions funding
- 2006: Reality-based 3D modeling of the Angkorian temples (Cambodia) using aerial images – ETH internal funding
- 2006: Investigation on RIM sensors – ETH internal funding
- 2005: 3D Modeling and documentation of the Artemis temple in Jerash (Jordan) – ETH and private funding
- 2004: Investigation on middle-resolution satellite imagery potential for landscape modeling, cartography generation and GIS applications – ETH internal funding

**Member of  
professional and  
scientific  
organisations**

- 2008-2012: ISPRS Chairman of Working Group V/4
- 2008-2012: CIPA - ISPRS Delegate
- 2004-2008: ISPRS Co-Chairman of Working Group V/4
- 2002-2007: CIPA (ISPRS & ICOMOS Committee for Documentation of Cultural Heritage) - National Delegate for Switzerland
- 2000-2008: ISPRS (International Society of Photogrammetry and Remote Sensing) webmaster
- 2000-2007: SGPBF (Swiss Society for Photogrammetry, Image Analysis and Remote Sensing) member

**Invited talks /  
keynotes**

- 3D Surveying for Cultural Heritage - EAC Symposium "Remote Sensing for Archaeological Heritage Management in the 21st century", March 2010, Reykjavik, ISLAND
- *Reality-based 3D modeling with photogrammetry: latest developments and applications* – 7<sup>th</sup> Eurographics 2009, Italian Chapter, October 2009, Verona, Italy
- *Critical overview of image-based 3D modeling* - Workshop "3D laser Scanning and Photogrammetry for Building Information Modeling", September 2008, Trondheim, Norway
- *3D modeling and visualization* – Conference on "Modern 3D Mapping Technologies for Municipalities Applications", December 2007, Istanbul, Turkey
- *Multiple techniques approach to the 3D virtual reconstruction of cultural heritage* - 5th Eurographics 2005, Italian Chapter, February 2007, Trento, Italy



- *3D Modeling, visualization and documentation of UNESCO cultural heritage areas: from 2D images to 3D models* - 7th Virtuality Conference - MIMOS Technical Meeting, October 2006, Turin, Italy
- *Photogrammetry for the documentation of cultural heritage* - International Summer School "Exploring Landscape Heritage", 27 November-2 December 2006, Campiglia Marittima, Italy
- *Videogrammetry for human movement analysis* – 9<sup>th</sup> International Symposium on the 3-D Analysis of Human Movement, June 2006, Valenciennes, France
- *Space technologies to model and document the Valley of Bamiyan* - UNESCO Int. Conference "Use of Space Technologies for the Conservation of Natural and Cultural Heritage", December 2005, Campeche, Mexico
- *Critical overview of image-based 3D modeling* - Int. Conference on "Recording, Modeling and Visualization of Cultural Heritage", May 2005, Ascona, Switzerland
- *35 years of Internet, 10 years of ISPRS online* - XXth ISPRS Congress, July 2004, Istanbul, Turkey
- *Image-based automated reconstruction of the Great Buddha of Bamiyan, Afghanistan* - IEEE CVPR Workshop on Applications of Computer Vision in Archeology, June 2003, Madison, USA
- *Automated modeling of the Great Buddha Statue in Bamiyan, Afghanistan* - ISPRS Conference "Photogrammetric Image Analysis", September 2003, Munich, Germany

#### Publications - Books

- Benedetti, B., Gaiani, G., Remondino, F., 2009: *Mesurés, dessinés et décrits avec la plus grande exactitude – A methodology for the surveying and 3D modeling of complex archaeological sites for the generation of advanced 3D databases. The case study of the archaeological area of Pompeii*. Scuola Normale Superiore editions, ISBN 88-7642-178-5, 347 pages (in press)
- Remondino, F., 2006: *Image-based modeling for object and human reconstruction*. Ph.D. Thesis, ETH No 16562, Institute of Geodesy and Photogrammetry, ETH Zurich, Switzerland, Mitteilungen No.91. ISBN 3-906467-61-9, 174 pages

#### Publications – Journal articles

1. Remondino, F., Rizzi, A., 2010: Reality-based 3D documentation of natural and cultural heritage sites – Techniques, problems and examples. *Int.Journal of Geomatics* (in press)
2. Barazzetti, L., Scaioni, M., Remondino, F., 2010: 3D modeling from markerless terrestrial images: combining accuracy with

automation. The Photogrammetric Record (in press)

3. Remondino, F., Petti, F., Girardi, S., Avanzini, M., Rizzi, A., 2010: 3D Ichnology – Recovering digital 3D models of dinosaur footprints. The Photogrammetric Record (in press)
4. Remondino, F., Girardi, S., Rizzi, A., Gonzo, L., 2009: 3D Modeling of complex and detailed Cultural Heritage using multi-resolution data. ACM Journal on Computing and Cultural Heritage, Vol. 2(1), article no. 2
5. Guidi, G., Remondino, F., Russo, M., Menna, F., Rizzi, A., Ercoli, S., 2009: A Multi-Resolution methodology for the 3D modeling of large and complex archaeological Areas. Journal of Architectural Computing, Vol. 7(1), pp. 40-55
6. Remondino, F., El-Hakim, S., Gruen, A., Zhang, L., 2008: Turning images into 3D models - Development and performance analysis of image matching for detailed surface reconstruction of heritage objects. IEEE Signal Processing Magazine, Vol.25(4), pp.55-65
7. El-Hakim, S., Gonzo, L., Voltolini, F., Girardi, S., Rizzi, A., Remondino, F., Whiting, E., 2007: Detailed 3D Modelling of Castles. Journal of Architectural Computing, Vol.5(2), pp. 199-220
8. El-Hakim, S., Remondino, F., Voltolini, F., 2008: Integrating Techniques for Detail and Photo-Realistic 3D Modelling of Castles. GIM International, Vol.22(3), pp. 21-25
9. Remondino, F., El-Hakim, S., 2006: Image-based 3D modelling: a review. The Photogrammetric Record, Vol.21(115), pp. 269-291
10. Remondino, F., Gruen, A., Zhang, L., 2006: High-Resolution satellite imagery for 3D modeling and visualization of Cultural Heritage sites. The Journal of Survey, Vol.56(5), pp. 30-33
11. Guarnieri, A., Vettore, A., Remondino, F., 2006: Photogrammetry and ground-based laser scanning: assessment of metric accuracy of the 3D model of Pozzoveggiani church. Bulletin SIFET, Nr.1
12. Gruen, A., Remondino, F., 2005: Die Rueckker der Buddhas - Photogrammetrie und kulturelles Erbe in Bamiyan, Afghanistan. PFG - Photogrammetrie, Fernerkundung, Geoinformation, Vol.1-2(9-10), pp. 57-68/157-164

13. Gruen, A., Remondino, F., Zhang, L., 2004: Photogrammetric reconstruction of the Great Buddha of Bamiyan, Afghanistan. *The Photogrammetric Record*, Vol.19(107), pp. 177-199
14. Remondino, F., 2004: 3-D Reconstruction of static human body shape from image sequence. *Computer Vision and Image Understanding*, Vol.93(1), pp. 65-85

**Publications –  
Peer reviewed  
conference articles**

1. Pelagotti, A., Del Mastio, A., Uccheddu, F., Remondino, F., 2009: Automated Multispectral Texture Mapping of 3D Models. 17<sup>th</sup> European Signal Processing Conference (EUSIPCO), 24-28 Aug., Glasgow, Scotland
2. Uccheddu, F., Del Mastio, A., Pelagotti, A., Remondino, F., Cappellini, V., 2009: Texture mapping of flat-like 3D models. 16th Int. Conference on Digital Signal Processing (DSP 2009), 5-7 July, Santorini, Greece
3. Guidi, G., Remondino, F., Russo, M., Menna, F., Rizzi, A., 2008: 3D modeling of large and complex site using multi-sensor integration and multi-resolution data. Proc. of 9<sup>th</sup> Int. Symposium on Virtual Reality, Archaeology and Cultural Heritage (VAST), pp.85-92, Braga, Portugal
4. Remondino, F., Girardi, S., Gonzo, L., Rizzi, A., 2008: Multi-resolution modeling of complex and detailed Cultural Heritage. Proc. of 9<sup>th</sup> Int. Symposium on Virtual Reality, Archaeology and Cultural Heritage (VAST), pp. 1-8, Braga, Portugal
5. Guidi, G., Remondino, F., Russo, M., Rizzi, A., Voltolini, F., Menna, F., Fassi, F., Ercoli, S., Masci, M.E., Benedetti, B., 2008: A multi-resolution methodology for archeological survey: the Pompeii Forum. Proc. of 14<sup>th</sup> Int. Conference on Virtual Systems and MultiMedia (VSMM), pp. 51-59, Limassol, Cyprus
6. Remondino, F., Girardi, S., Gonzo, L., Nicolis, F., 2008: Detailed 3d reconstruction of the great inscription of Gortyna, Crete: acquisition, registration and visualization of multi-resolution data. Proc. of 14<sup>th</sup> Int. Conference on Virtual Systems and MultiMedia (VSMM), pp. 404-412, Limassol, Cyprus
7. Manferdini, A.M., Remondino, F., Baldissini, S., Gaiani, M., Benedetti, B., 2008: 3D modeling and semantic classification of archaeological finds for management and visualization in 3D archaeological databases. Proc. of 14<sup>th</sup> Int. Conference on Virtual

Systems and MultiMedia (VSMM), pp. 221-228, Limassol, Cyprus

8. Remondino, F., Campana, S., 2007: Fast and detailed digital documentation of archaeological excavations and heritage artifacts Proc. of CAA 2007 Conference (Computer Applications and Quantitative Methods in Archaeology), Berlin, Germany
9. Lambers, K., Remondino, F., 2007: Optical 3D measurement techniques in archaeology: recent developments and applications. Proc. of CAA 2007 Conference (Computer Applications and Quantitative Methods in Archaeology), Berlin, Germany
10. El-Hakim, S., Remondino, F., Voltolini, F., Gonzo, F., 2007: Effective high resolution 3D geometric reconstruction of heritage and archaeological sites from images. Proc. of CAA 2007 Conference (Computer Applications and Quantitative Methods in Archaeology), Berlin, Germany
11. Gonzo, L., Voltolini, F., Girardi, S., Rizzi, A., Remondino, F., El-Hakim, S., 2007: Multiple techniques approach to the 3D virtual reconstruction of Cultural Heritage. Invited Paper. 5th Eurographics Italian Chapter Conference 2007 - R. De Amicis and G. Conti (Eds), Trento, Italy
12. Remondino, F., Fraser, C., 2006: Digital camera calibration methods: considerations and comparisons. International Archives of Photogrammetry, Remote Sensing and Spatial Information Sciences, Vol. XXXVI, part 5, pp. 266-272. ISPRS Commission V Symposium, Dresden, Germany
13. Voltolini, F., Remondino, F., Pontin, M., Gonzo, L., 2006: Experiences and considerations in image-based-modeling of complex architectures. International Archives of Photogrammetry, Remote Sensing and Spatial Information Sciences, Vol. XXXVI, part 5, pp. 309-314. ISPRS Commission V Symposium, Dresden, Germany
14. Kahlmann, T., Remondino, F., Ingensand, H., 2006: Calibration for increased accuracy of the range imaging camera SwissRanger. International Archives of Photogrammetry, Remote Sensing and Spatial Information Sciences, Vol. XXXVI, part 5, pp. 136-141. ISPRS Commission V Symposium, Dresden, Germany
15. Remondino, F., Zhang, L., 2006: Surface reconstruction algorithms for detailed close-range object modeling. International

Archives of Photogrammetry, Remote Sensing and Spatial Information Sciences, Vol. XXXVI, part 3, pp. 117-123. ISPRS Commission III Symposium, Bonn, Germany

16. Remondino, F., 2006: Detectors and descriptors for photogrammetric applications. International Archives of Photogrammetry, Remote Sensing and Spatial Information Sciences, Vol. XXXVI, part 3, pp. 49-54. ISPRS Commission III Symposium, Bonn, Germany
17. Remondino, F., Ressel, C., 2006: Overview and experience in automated markerless image orientation. International Archives of Photogrammetry, Remote Sensing and Spatial Information Sciences, Vol. XXXVI, part 3, pp.248-254. ISPRS Commission III Symposium, Bonn, Germany
18. Ortin, D., Remondino, F., 2005: Occlusion-free image generation for realistic texture mapping. International Archives of Photogrammetry, Remote Sensing and Spatial Information Sciences, Vol. XXXVI, part 5/W17. International Workshop of ISPRS WG V/4 '3D-ARCH 2005: Virtual Reconstruction and Visualization of Complex Architectures', Mestre-Venice, Italy
19. Remondino, F., D'Apuzzo, N., Schrotter, G., Roditakis, A., 2004: Markerless motion capture from single or multi-camera video sequence. Int. Workshop on Modelling and Motion Capture Techniques for Virtual Environments (CAPTECH 2004), pp.8-12, Zermatt, Switzerland
20. Remondino, F., Niederoest, J., 2004: Generation of high-resolution mosaic for photo-realistic texture-mapping of cultural heritage 3D models. Proceedings of the 5th International Symposium on Virtual Reality, Archaeology and Cultural Heritage (VAST) - K.Cain, Y.Chrysanthou, F.Niccolucci, N.Silberman (Eds), pp. 85-92
21. Remondino, F., Roditakis, A., 2004: Human motion reconstruction and animation from video sequences. 17th International Conference on Computer Animation and Social Agents (CASA2004), pp. 347-354. Computer Graphics Society (CGS). Geneva, Switzerland
22. Remondino, F., Roditakis, A., 2003: Human figure reconstruction and modeling from single images or monocular video sequences. The 4th International Conference on 3-D Digital Imaging and Modeling (3DIM), pp. 116-123, Banff, Canada

23. Remondino, F., Roditakis, A., 2003: 3D Reconstruction of human skeleton from single images or monocular video sequences. 25th Pattern Recognition Symposium (DAGM 03), Lecture Notes in Computer Science, Springer 2003, pp. 100-107, Magdeburg, Germany
24. Gruen, A., Remondino, F., Zhang, L., 2003: Image-based automated reconstruction of the Great Buddha of Bamiyan, Afghanistan. IEEE Conference on Computer Vision and Pattern Recognition (CVPR), Madison, Wisconsin, USA
25. Remondino, F., 2002: Human body reconstruction from image sequences. 24th Pattern Recognition Symposium (DAGM 2002) - Luc Van Gool (Ed), Lecture Notes in Computer Science 2449, Springer 2002, pp. 50-57, Zurich, Switzerland

**Publications –  
Conference  
articles**

1. Barazzetti, L., Remondino, F., Scaioni, M., 2009: Ricostruzione automatica di oggetti terrestri con immagini digitali. Proc. 13rd ASITA Conference, 1-4 Dec., Bari, Italy
2. Remondino, F., Rizzi, A., 2009: Reality-based 3D documentation of World Heritage Sites – Methodologies, problems and examples. Proc. of 22<sup>nd</sup> CIPA Symposium, 11-15 Oct., Kyoto, Japan
3. Remondino, F., Gruen, A., von Schwerin, J., Eisenbeiss, H., Rizzi, A., Sauerbier, M., Richards-Rissetto, H., 2009: Multi-sensors 3D documentation of the Maya site of Copan. Proc. of 22<sup>nd</sup> CIPA Symposium, 11-15 Oct., Kyoto, Japan
4. Zucca, F., Remondino, F., Zizioli, D., Meisina, C., 2009: Slopes survey and analysis using photogrammetrically derived Digital Surface Models. Proc. of RSPSoc 2009 Annual Conference, pp. 494-500, 8-11 Sept., Leicester, UK
5. Remondino, F., Petti, F.M., Rizzi, A., Avanzini, M., Girardi, S., 2009: Photogrammetry for Ichnology - Recovering detailed digital surface models of dinosaur footprints using advanced image matching algorithms. Proc. of RSPSoc 2009 Annual Conference, pp. 190-196, 8-11 Sept., Leicester, UK
6. Campana, S., Remondino, F., Sordini, M., Rizzi, A., 2009: 3D modeling of a romanesque church in Tuscany: archaeological aims and geomatics techniques. Proc. of 3<sup>rd</sup> Int. Conf. on Remote

Sensing in Archaeology, Tiruchirappalli, Tamil Nadu, India

7. Guidi, G. Remondino, F., Russo, M., Spinetti, A., 2009: Range sensors on marble surfaces: quantitative evaluation of artifacts. Videometrics, Range Imaging and Applications X, Proc. of SPIE Optics+Photonics, Vol. 7447, 2-3 August, San Diego, CA, USA
8. Barazzetti, L. Remondino, F., Scaioni, M., 2009: Combined use of photogrammetric and computer vision techniques for fully automated and accurate 3D modeling of terrestrial objects. Videometrics, Range Imaging and Applications X, Proc. of SPIE Optics+Photonics, Vol. 7447, 2-3 August, San Diego, CA, USA
9. Remondino, F., Pelagotti, A., Del Mastio, A., Ucheddu, F., 2009: Novel data registration techniques for art diagnostics and 3D heritage visualization. IX Conference on Optical 3D Measurement Techniques - Gruen/Kahmen (Eds), Vol.1, July 2009, Vienna, Austria
10. Guidi, G., Remondino, F., Russo, M., Menna, F., Rizzi, A., Ercoli, S., 2009: Digitizing the Pompeii Forum. 37th Computer Applications and Quantitative Methods in Archaeology (CAA 2009), 22-28 March, Williamsburg, Virginia, USA
11. Remondino, F., El-Hakim, S., Girardi, S., Rizzi, A., Benedetti, S., Gonzo, L., 2009: 3D Virtual reconstruction and visualization of complex architectures - The 3D-ARCH project. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences, Vol. 38(5/W1), Trento, Italy (on CD-Rom)
12. El-Hakim, S., Beraldin, J.-A., Remondino, F., Picard, M., Cournoyer, L., Baltsavias, M., 2008: Using terrestrial laser scanning and digital images for the 3D modelling of the Erechteion, Acropolis of Athens. Proc. of "Digital Media and its Applications in Cultural Heritage" (DMACH), pp. 3-16, Amman, Jordan
13. Campana, S., Sordini, M., Remondino, F., 2008: Integration of geomatics techniques for the digital documentation of heritage areas. EARSEL workshop Advances in Remote Sensing in the Archaeology and the management of Cultural Heritage, Rome, Italy
14. Gruen, A., Remondino, F., Hanusch, T., 2008: Computer reconstruction from images – the example Bamiyan. 14<sup>th</sup> EAA Conference, Valletta, Malta

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