

Curriculum Vitae

October 2010

Lazaros Grammatikopoulos

Surveying Engineer, Ph.D.

Lecturer in Photogrammetry

*Department of Surveying Engineering
Technological Educational Institute of Athens (TEI-A)*

1. Studies

- 1999** Surveying Engineer, Department of Rural & Surveying Engineering, National Technical University of Athens
- 2007** Ph.D., Department of Rural & Surveying Engineering, National Technical University of Athens
Dissertation: "*Geometric Information from Single Images in Photogrammetry and Computer Vision*"

2. Teaching

- 2010–today:** Lecturer in Photogrammetry in the Department of Surveying Engineering teaching the courses *Photogrammetry II*, *Photogrammetry III* and *Photogrammetric Applications*.
- 2002–today:** Auxiliary teaching in the courses *Photogrammetry III (Digital Photogrammetry)* and *Summer Field Course in Photogrammetry* in the department of Rural and Surveying Engineering (NTUA).
- 2003–2010:** Laboratory Assistant in the department of Surveying Engineering of the Technological Educational Institute of Athens (TEI-A) in the courses *Photogrammetry III* and *Applications of Photogrammetry*.
- 2007–2008:** Auxiliary teaching in the courses *Digital Photogrammetric Methods* and *Large Scale Mapping* in the postgraduate studies of Geoinformatics (NTUA).

3. Research Projects

- 2005–2007** *Development of Algorithms for the Automatic Generation of Accurate Photorealistic Models by Combining Photogrammetry, Image Processing and Laser Scanning – Application in the Documentation of Cultural Heritage* (Financed within the “Archimedes II – Support of Research Groups of TEI” framework)
- 2005–2007** *Investigation of Modern Techniques and Automatic Approaches for the Generation of “True Othoimages” with Application in the Documentation of a Roman Monument* (Financed by the Greek Ministry of Culture).
- 2005–2006** *Development of educational software for the solution of basic Photogrammetric Problems.* (Financed: Operational Programme for Education and Initial Vocational Training II – EPEAEK II)

4. Citations

There are 100 citations of my publications in the international scientific literature (October 2010)

5. Scientific Publications

- 2009 V. Douskos, L. Grammatikopoulos, I. Kalisperakis, G. Karras, E. Petsa, FAUCCAL: An open source toolbox for fully automatic camera calibration. *International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences*, Vol. XXXVII, Part B5, pp. 21-26.
- 2009 Prokos A., G. Karras, L. Grammatikopoulos, Design and evaluation of a photogrammetric 3D surface scanner. *XXII CIPA Symposium on Digital Documentation, Interpretation & Presentation of Cultural Heritage*, October 11-15, 2009, Kyoto, Japan
- 2008 Moullou D., D. Mavromati, V. Tsingas, C. Liapakis, L. Grammatikopoulos, S. Raikos, A. Sarris, E. Baltsavias, F. Remondino, J.-A. Beraldin, S. El-Hakim, L. Cournoyer, M. Picard, Recording, modeling, visualisation and GIS applications development for the Acropolis of Athens. *International Archives of the Photogrammetry, Remote Sensing & Spatial Information Sciences*, Vol. XXXVII, Part B5, pp. 1073-1076.
- 2008 Remondino F., S. El-Hakim., E. Baltsavias, M. Picard, L. Grammatikopoulos,

Image-based 3D modeling of the Erechteion, Acropolis of Athens. *International Archives of the Photogrammetry, Remote Sensing & Spatial Information Sciences*, Vol. XXXVII, Part B5, pp. 1083-1092.

- 2008 Tsingas V., C. Liapakis, V. Xylia, D. Mavromati, D. Moulou, L. Grammatikopoulos, C. Stentoumis, 2008. 3D modeling of the Acropolis of Athens using balloon images and terrestrial laser scanning. *International Archives of the Photogrammetry, Remote Sensing & Spatial Information Sciences*, Vol. XXXVII, Part B5, pp. 1101-1106.
- 2007 Karras G., Grammatikopoulos L., Kalisperakis I., Petsa E., Generation of orthoimages and perspective views with automatic visibility checking and texture blending. *Photogrammetric Engineering and Remote Sensing*, 73(4), pp. 403-411
- 2007 Grammatikopoulos L., Karras G., Petsa E., An automatic approach for camera calibration from vanishing points. *ISPRS Journal of Photogrammetry & Remote Sensing*, 62, pp. 64-76.
- 2007 Grammatikopoulos L., Kalisperakis I., Karras G., Petsa E., Automatic multi-view texture mapping of 3D surface projections. *3D Virtual Reconstruction and Visualization of Complex Architectures (3D Arch '07)*, July 12-13, ETH Zürich, Switzerland.
- 2007 Petsa E., Kalisperakis I., Grammatikopoulos L., Karras G., Pagounis V., Laser scanning and automatic multi-image texturing of surface projections. *XXI CIPA International Symposium*, Athens, 1-6 October, pp. 579-584.
- 2006 Kalisperakis I., Grammatikopoulos L., Petsa E., Karras G., An open-source educational software for basic photogrammetric tasks. *Proceedings of the FIG-ISPRS-ICA International Symposium on "Modern Technologies, Education & Professional Practice in Geodesy & Related Fields"*, Sofia, 09-10 November, pp. 581-586.
- 2006 Grammatikopoulos L., Karras G., Petsa E., Kalisperakis I., A unified approach for automatic camera calibration from vanishing points. *International Archives of the Photogrammetry, Remote Sensing & Spatial Information Sciences*, Vol. XXXVI, Part 5 (in CD).
- 2006 Γραμματικόπουλος Λ., Καλησπεράκης Η., Καρράς Γ., Μαυρομάτη Δ., Πέτσα Ε., Σύγχρονες ψηφιακές τεχνικές τεκμηρίωσης στην επίγεια φωτογραμμετρία. 2^ο Συνέδριο Πανελληνίου Συλλόγου Αγρονόμων Τοπογράφων Μηχανικών, Αθήνα, 9-10 Δεκεμβρίου.

- 2006 3D aspects of 2D epipolar geometry. I. Kalisperakis, G. Karras, L. Grammatikopoulos. *International Archives of the Photogrammetry, Remote Sensing & Spatial Information Sciences*, Vol. XXXVI, Part 3, pp.255-259.
- 2005 Grammatikopoulos L., Kalisperakis I., Karras G., Petsa E., Data fusion from multiple sources for the production of orthographic and perspective views with automatic visibility checking. *Proc. XX CIPA International Symposium*, Torino, 27 September - 1 October, pp. 819-824.
- 2005 Grammatikopoulos L., Karras G., Petsa E., Automatic estimation of vehicle speed from uncalibrated video sequences. *Proceedings of the FIG-ISPRS-ICA International Symposium on "Modern Technologies, Education & Professional Practice in Geodesy & Related Fields"*, Sofia, 03-04 November, pp. 332-338.
- 2004 Grammatikopoulos L., Kalisperakis I., Karras G., Kokkinos T., Petsa E., On automatic orthoprojection and texture-mapping of 3D surface models. *International Archives of the Photogrammetry, Remote Sensing & Spatial Information Sciences*, 35(5), pp. 360-365.
- 2004 Grammatikopoulos L., Karras G., Petsa E., Camera calibration combining images with two vanishing points. *International Archives of the Photogrammetry, Remote Sensing & Spatial Information Sciences*, 35(5), pp. 99-104.
- 2004 Grammatikopoulos L., Kalisperakis I., Karras G., Kokkinos T., Petsa E., Automatic multi-image photo-texturing of 3D surface models obtained with laser scanning. *CIPA International Workshop on "Vision Techniques Applied to the Rehabilitation of City Centres"*, Lisbon, 25-27 October
- 2003 Grammatikopoulos L., Karras G., Petsa E., Camera calibration approaches using single images of man-made objects. *XIX CIPA International Symposium, Antalya, Turkey*, pp. 328-332.
- 2002 Grammatikopoulos L., Karras G., Petsa E., Geometric information from single uncalibrated images of roads. *International Archives of Photogrammetry & Remote Sensing*, 34(B5), pp. 21-26.

6 . Other Scientific Activities

2001–2002: Consultant of Digital Photogrammetry at the Department of Photogrammetry in the Cyprus Cadastre for the European program “Mapping and Project Valuation – Technical Assistance in Computerized Valuation”.

2004–today: Member of the Council of the Hellenic Society for Photogrammetry and Remote Sensing (HSPRS).

2005: Visit at the INRIA research institute (*Institut National de Recherche en Informatique et en Automatique*) and presentation of the progress of the PhD Thesis (15/3/2005 until 25/3/2005).

7 . Technical Expertise

- Programming languages: C / C++ / C#, Visual Basic, Java, Matlab, HTML, VRML, XML, OpenGL)
- Databases: MySQL, Oracle, Access
- Experience in digital and analytical Photogrammetric Workstations (Inpho, LPS Leica Photogrammetry Suite, SocetSet, Intergraph-Z/I, Dvp, Adam).
- Experience in Remote Sensing and GIS applications (Erdas, Geomedia, Arc-GIS, Apollo Erdas, Manifold).
- Experience in 3D Laser Scanning (Leica, Trimble, Surphaser) and in processing – modeling of range data (Geomagic, Polyworks, RapidForm, Cyclone, CloudWorx, Rhinoceros).
- Specialized (certified) user for Leica scanners (Leica Geosystems DSW).
- Web design (Director, Flash, Dreamweaver, Joomla, FrontPage)
- 3D graphics software (3D Studio Max, LightWave, Maya)
- CAD software (Autocad Civil, Microstation) and programming (ARX, MDL, ADS, VBA)