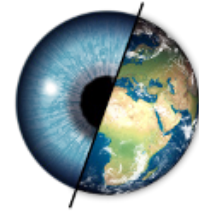


PANAYOTIS PARTSINEVELOS

Technical University of Crete
School of Mineral Resources Engineering
University Campus
73100 Chania, Crete, Greece
+030 28210 37676
mob. +030 6974478823
email: ppartsi@mred.tuc.gr



www.senselab.tuc.gr

PROFESSIONAL STANDING

- 2008-current Technical University of Crete, Dept of Mineral Resources Engineering, Greece
Assistant Professor (2012 – current),
Computational Analysis in Spatial Information Science
- 2006-2008 Ministry of Rural Development, Athens, Greece
Engineer, Geographic information systems expert
- 2006-2008 Technological Educational Institute of Athens, Dept. of Topography, Greece
External Academic Faculty in Special Issues on Remote Sensing
- 2005-2006 Technical University of Crete, Dept of Mineral Resources Engineering, Greece
External Academic Faculty-Lecturer in Remote Sensing and Geodesy
- 1997-2002 University of Maine Maine, USA
Researcher & Teaching Assistant
Digital Image Processing, Photogrammetry, Adjustment Computations

ACADEMIA- STUDIES

- 2003-2004 Research Academic Computer Technology Institute, Athens, Greece
University of Patras
Postdoctoral researcher in Knowledge Management and GIS
- 1997-2002 University of Maine MAINE, USA
Ph.D., Dept of Spatial Information Science & Engineering
Focus on GIS & Image Processing, Minor in Civil Engineering
GPA: 3.84
- 1991-1996 National Technical University of Athens (NTUA) Athens, Greece
Dipl. Eng. in Surveying Engineering

Research Interests [GIS, Remote Sensing, Photogrammetry, Computational Analysis]:

- Graphical user interfaces in spatial databases/ queries by sketch/ gestural user interfaces,
- Spatiotemporal data modeling/ topology/ scene similarity/ trajectory behavioral analysis,
- Multi-temporal satellite image processing/ classification novel algorithms/ monitoring applications,
- Location based services/ pipeline urban protection/ e-Government applications,
- Unmanned Aerial Vehicles for mapping/ communication/ collision avoidance,
- GIS tangible systems/ 3D Visualization,
- Neuro-morphing and cognitive processes in image processing,
- Neural networks/ Self-organizing map generalization,
- Optimization of belt conveyor location in mines/ Image processing in mineral liberation
- Video processing for rockfall monitoring,
- Environmental, mining, global change, neuroscience applications.

SELECTED RESEARCH PROJECTS

- Co- Principal Investigator, **Development of a prototype real 3-D forming touch table for interactive 3-D Geographical Information System**, "Cooperation 2011" funded from the Operational Program "Competitiveness and Entrepreneurship", cofunded by the European Regional Development Fund, managed by the Greek General Secretariat for Research and Technology 2012-2015, budget: 1,392,900 Euros.
- Principal Investigator - Coordinator, **Spatiotemporal Queries by Sketch in Moving Object Geodatabases**, Technical University of Crete, 2010-current, Support on Basic research.
- Researcher, **Photogrammetric survey of Fragokastello Castle Archaeological site using Unmanned Aerial Vehicles**, 2015.
- Principal Investigator, European Space Agency, Project No: 11655, **Monitoring ground subsidence due to ground and underground mining activities in northern Greece**, 2012.
- Project Coordinator: **Development of a prototype Unmanned Aerial Swarm Communication System for mapping missions**, Innovation and Entrepreneurship of the University of Crete, Operational Program Education and Learning, Co-funded from the European Union and National Funds, 2015.
- Helmholtz-Centre Potsdam - GFZ German Research Centre for Geosciences, **Bilateral Educational Exchange Program Greece-Germany**, 2014.
- FP7-REGPOT-2008-1 Project No: 229885 "**SOFIA: Enhancement of Crete's potential for a dedicated calibration facility for satellite radar altimeters and for tectonic deformation monitoring using continuously operating geodetic arrays**", 2008-2014, Technical University of Crete, Laboratory of Geodesy and Geomatics Engineering.
- FP7, **Early Recognition, Monitoring, and Integrated Management of Emerging, New Technology related Risks**, iNTeg-Risk, Project coordinator: European Virtual Institute for Integrated Risk Management EEIG (EU-VRI), 2008-2013, Total project budget: ~19.3 million €.
- "Cooperation 2011" project ISTRIA (11_SYN_9_13989), **Development of an integrated system for the identification of rock falls on motorways**, funded from the Operational Program "Competitiveness and Entrepreneurship" (co-funded by the European Regional Development Fund (ERDF)) and managed by the Greek General Secretariat for Research and Technology, 2012-2015.
- **Anthropogenic Intervention assessment in Greek coastal regions**, co-funded by the European Social Fund and National Resources - (EPEAEK II) ARXIMHDHS.
- **Digital Government on Knowledge Management Over Time-Varying Geospatial Datasets** sponsored by National Science Foundation (NSF).
- **Geospatial Database-Driven Extraction of Information from Digital Aerial Imagery**, sponsored by NSF.

SELECTED PUBLICATIONS

- Partsiavelos P., P. Agouris & A. Stefanidis, "**Reconstructing Spatiotemporal Trajectories from Sparse Data**", in Journal of Photogrammetry and Remote Sensing (PE&RS), vol. 60, no 1, pp. 3-16 (14), Elsevier Science, 2005.
- Partsiavelos P. & N. Tryfona, "**Handling High-level Queries in Location-based Services for User Groups**", in Geoinformatica Journal, vol. 10, no 2, pp. 213-234(22), Springer, 2006.z
- Partsiavelos, P. (2008), "**Multi-Modal Comparison of Object Trajectories**", in Journal of Spatial Sciences, 2008.
- Miliaresis G., P. Partsiavelos, (2010), "**Terrain Segmentation of Egypt from Multi-temporal Night LST Imagery and Elevation Data**", in Remote Sensing Journal, 2, 2083-2096 p.,doi:10.3390/rs2092083.
- Mertikas S. P., A. Daskalakis, I. N. Tziavos, G. S. Vergos, X. Frantzis, A. Tripolitsiotis, P. Partsiavelos, D. Andrikopoulos & V. Zervakis (2011), "**Ascending and Descending Passes for the Determination of the Altimeter Bias of Jason Satellites using the Gavdos Facility**", Marine Geodesy, 34:3-4, 261-276, doi: 10.1080/01490419.2011.584837.
- Partsiavelos P., (2011), "**Registering randomly oriented scenes through moving object attributes**", International Journal of Geographical Information Science, 25:11, 1793-1807, doi: 10.1080/13658816.2011.552064.
- Petropoulos, G., Partsiavelos, P., Mitraka, Z., (2012), "**Change detection of surface mining activity and reclamation based on a machine learning approach of multi-temporal Landsat TM imagery**", Geocarto International.
- Partsiavelos P., E. Th. Stamboliadis, and K. Makantasis, (2012), "**Image based mineral liberation simulation incorporating experimental grinding models**", Canadian Metallurgical Quarterly, Maney Publishing, doi: 10.1179/1879139512Y.0000000025.
- Partsiavelos P., Papadakis, K., and Makantasis, K., (2013), "**Spatiotemporal graph queries on geographic databases under a conceptual abstraction scale**", Geo-spatial Information Science, Taylor and Francis.
- Roumpos, C., Panagiotis Partsiavelos, Zacharias Agioutantis, Kostas Makantasis, Antigoni Vlachou, (2014), "**The optimal location of the distribution point of the belt conveyor system in continuous surface mining operations**", Simulation Modelling Practice and Theory, Elsevier, pp. 19-27.
- Stefanidis A., P. Partsiavelos, P. Agouris & P. Doucette "**Summarizing Video Datasets in the Spatiotemporal Domain**", Proceedings DEXA 2000, Advanced Spatial Data Management Workshop (ASDM) 2000, IEEE Press London, UK, 2000.
- Partsiavelos P., P. Agouris & A. Stefanidis "**Modeling Movement Relations in Dynamic Urban Scenes**", International Archives of Photogrammetry & Remote Sensing, Vol. XXXIII, Amsterdam, 2000.
- Stefanidis A., P. Partsiavelos & P. Agouris "**Using Lifelines for Spatiotemporal Summaries**", DG.O 2001 Proceedings, National Conference on Digital Government Research, Los Angeles, CA, 2001.
- Stefanidis A., P. Partsiavelos, K. Eickhorst & P. Agouris "**Spatiotemporal Lifelines in Support of Video Queries**", Proceedings DEXA Workshop 2001, Query Processing and Multimedia Issues in Distributed Systems (QPMIDS), Munich, 2001.
- Partsiavelos P., A. Stefanidis & P. Agouris "**Automated Spatiotemporal Scaling for Video Generalization**", IEEE-ICIP 2001, Thessaloniki, Greece, 2001.

- Stefanidis A., P. Agouris, P. Partsinevelos "**Summarizing the content of motion imagery datasets**", International Archives of Photogrammetry & Remote Sensing, Corfu, Greece, 2002.
- Stefanidis A., P. Agouris, P. Partsinevelos "**Spatiotemporal Helixes for Event Modeling**", DG.O 2002 Proceedings, National Conference on Digital Government Research, Los Angeles, CA, 2002.
- Stefanidis A., K. Eickhorst, P. Agouris & P. Partsinevelos "**Modeling and Comparing Change using Spatiotemporal Helixes**", **ACM-GIS**, ACM Press, pp. 86-93, New Orleans, LA, 2003.
- Agouris P., P. Partsinevelos & A. Stefanidis "**Differentiating and modeling multiple moving objects in motion imagery datasets**", International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences, Vol. XXXIV-5/W10, Engadin, Switzerland, 2003.
- Kiousopoulos J., P. Partsinevelos, M. Pigaki, N. Tsiougou & I. Veizi, (2008), "**Anthropogenetic Intensity Indicator; Measuring Human Impact Along Coastal Areas**", in Inter. Conf. Studying, Modeling and Sense Making of Planet Earth, Mytilene, Lesvos, Greece, 1 – 6 June, 2008.
- Mertikas, S. P. , R. Ioannides, X. Frantzis, A. Tripolitsiotis, P. Partsinevelos, I. N. Tziavos, G. S. Vergos, W. Hausleitner (2009), "**Recent Developments for the estimation of the altimeter bias for the Jason-1&2 satellites using the dedicated calibration site at Gavdos**", Proceedings of SPIE, Remote Sensing of the Ocean, Sea Ice, and Land Water Regions 2009, 31 Aug, 2009, Berlin, Germany, Vol. 7473, 74730C-1.
- Partsinevelos P. & G. Miliareisis (2009), "**Spatiotemporal filtering of multi-temporal images: application on MODIS sea surface temperature (SST) imagery**", 5th International Workshop on the Analysis of Multi-temporal Remote Sensing Images, Groton, CT, 2009.
- Partsinevelos P., "**Orientation independent scene registration through multiple moving object topology**", 5th International Workshop on the Analysis of Multi-temporal Remote Sensing Images, Groton, CT, 2009.
- Agadacos, Y., Makantasis, K., Partsinevelos, P., Papadakis, G., Doulamis, A., (2013) **Safe Urban Growth: An Integrated ICT Solution for Unstandardized and Distributed Information Handling**, International Workshop on Smart City and Ubiquitous Computing Applications - June 4th, 2013.
- Partsinevelos P. & N. Tryfona "**Abstract Level Queries in Location-Based Services**", Technical Report No. TR2004/11/03, Research Academic Computer Technology Institute, November 2004.
- Partsinevelos P., D. Pfoser & N. Tryfona "**The Space and Time Ontology in Location-based Services**", Technical Report No. TR2004/06/03, Research Academic Computer Technology Institute, June 2004.
- Veizi I., N. Tsiougou, C. Kouki, D. Matsa, G. Tsiougos, N. Lakafosis, M. Zarras, G. Miliareisis, P. Partsinevelos, M. Pigaki, (2007), "**Anthropogenetic intensity, a new indicator to measure coastal man-made volume, case study: Navpaktos -Aetolia-Acarmania, Greece**", Future Perspectives of GeoInformation for Integrated Coastal Management, GISIG/ICCOPS/ECOImagine, Genoa, 21-23 November, 2007.
- Mertikas, S. P. , R. Ioannides, X. Frantzis, P. Partsinevelos, A. Tripolitsiotis (2009), "**Determination of the Jason altimeter bias using the Gavdos calibration site**", 3rd Coastal Altimetry Workshop, Frascati, Italy, 17-18 September.
- Mertikas, S. P. , R. Ioannides, A. Tripolitsiotis, X. Frantzis, P. Partsinevelos (2009), "**Recent Developments in the Gavdos calibration site**", Cryosat-2 and ICESAT Meeting, Reykjavik, Iceland, 23-26 June, 2009, Oral Presentation.

- Mertikas, S. P. , R. Ioannides, X. Frantzis, P. Partsinevelos, A. Tripolitsiotis (2009), "**Recent Results for the Estimation of the Altimeter Bias For the Jason satellites Using Gavdos**", Ocean Surface Topography Science Team Meeting, Seattle, Washington, USA, 22-24 June, 2009, Poster and Oral Presentation.
- Eirini Papadaki ; Achilleas Tripolitsiotis ; Chrysanthos Steiakakis ; Zacharias Agioutantis ; Stelios Mertikas, Panagiotis Partsinevelos, Pavlos Schilizzi, (2013), **Land movement monitoring at the Mavropigi lignite mine using spaceborne D-InSAR** ", Proc. SPIE 8795, First International Conference on Remote Sensing and Geoinformation of the Environment (RSCy2013), 87951A (August 5, 2013); doi:10.1117/12.2027100; <http://dx.doi.org/10.1117/12.2027100>.
- Partsinevelos Panagiotis, Ioannis Agadacos, Vasilis Athanasiou, Ioannis Papaefstathiou, Stylianos Mertikas, Sarantis Kyritsis, Achilles Tripolitsiotis, and Panagiotis Zervos (2014), **On-board computational efficiency in real time UAV embedded terrain reconstruction**, EGU General Assembly Conference 2014.
- Partsinevelos Panagiotis and Manolis Perakakis, (2014). **A neuromorphic approach to satellite image understanding**, EGU General Assembly Conference 2014 (Accepted-Presented).
- Partsinevelos P., A. Tzes, S. Manesis, I. Agadacos and A. Tripolitsiotis, (2014), **Architecture of a tangible 3-D forming table for interactive spatial decision support systems**, 2nd International Conference on Remote Sensing and Geoinformation of Environment, 7-10 April 2014, Paphos, Cyprus.
- Partsinevelos P., I. Agadacos, N. Agadacos, S. Kyritsis, M. Perakakis, V. Athanasiou, (2014). **UAV Positional Synergy using Wifi RSSI**, 2nd International Conference on Remote Sensing and Geoinformation of Environment, 7-10 April 2014, Paphos, Cyprus.
- Panagiotis Partsinevelos, Nikolaos Skoutelis, Achilleas Tripolitsiotis, Stelios Tsatsarounos, Anna Tsitonaki, Panagiotis Zervos, (2015). **Mapping of traditional settlements by unmanned airborne vehicles towards architectural restoration**, Third International Conference on Remote Sensing and Geoinformation of the Environment, International Society for Optics and Photonics.
- Panagiotis Partsinevelos, Kostas Papadakis, (2015). **Spatially constrained clustering over GIS generated suitability maps**, Third International Conference on Remote Sensing and Geoinformation of the Environment, International Society for Optics and Photonics.
- Panagiotis Partsinevelos, Mary Sartzetaki, Apostolos Sarris, (2015). **Spatiotemporal conceptual platform for querying archaeological information systems**, EGU General Assembly Conference Abstracts, Vol. 17.
- Sarantis Kyritsis, Stathis Bikos, Stelios Tsatsarounos, Aggelos Antonopoulos, Panagiotis Partsinevelos, (2015). **Gestural navigation of the "TUC" Unmanned Aerial Vehicle**, International Conference SafeChania, June 2015.
- Sarantis Kyritsis & Panagiotis Partsinevelos, (2015). **Tangible, dynamic, real time geomorphology representation using sand forms**, International Conference SafeChania, June 2015.

Dissertations

- Dipl. Eng. Thesis: P. Partsinevelos "**Adjustment of mathematical surface models in real surfaces.- Application in parabolic antennas**", National technical University of Athens, Athens, Greece, 1996.
- Doctorate Thesis: P. Partsinevelos "**Detection and generalization of spatio-temporal trajectories for motion imagery**", University of Maine, Orono, USA, 2002.

ACADEMIC ACTIVITIES

Teaching

- Geotechnologies and Geographic Information Systems (Graduate, 2008-current),
- Special Topics on Computational Analysis in Geosciences (Graduate, 2015-current)
- Remote Sensing of the Environment (Graduate, 2008-current),
- Detection and identification of mineral resources (Graduate, 2014),
- Remote Sensing (Undergraduate, 2009-current),
- Introduction in Computer Systems for Mineral Resources Engineers (Undergraduate, 2008-current),
- Special Topics in Remote Sensing (Undergraduate, 2006-2008),

Refereeing

- ACM Geographic Information Systems International Conference, ACM,
- & Geoinformatica Journal, Springer,
- Sensors Journal, MDPI,
- Journal of Electronic Imaging, SPIE,
- Nonlinear Processes in Geophysics Journal, EGU,
- Computers and Geosciences Journal, Elsevier,
- Journal of Photogrammetry and Remote Sensing, ISPRS,

Selected Awards

- 2007 Future Perspectives of Geoinformation FOR ICM conference, Genoa, Italy
Second position on poster presentation,
- 2003-2004 Greek National Scholarship Foundation, Athens, Greece
Post-Doctorate Research Scholarship,
- 2000 International Society of Photogrammetry & Remote Sensing, International
International ISPRS Robert E. Altenhofen Memorial Scholarship Award
- 1998 University of Maine, Graduate Trustee Tuition Scholarship, MAINE, USA
- 1997-2001 Greek National Scholarship Foundation, Athens, Greece
Doctorate Scholarship,

Other Activities

- **Conference Chair** & Organizing Chair: International Conference SafeChania, **New Technologies serving Civil Protection**, Chania, Crete, Greece, 2015,
- Organizing Committee: ISPRS Conference, **Integrated Sensor Calibration and Orientation**, Portland ME, USA,

Memberships (current or former)

- American Society for Photogrammetry and remote Sensing, (**ASPRS**),
- European Geosciences Union (**EGU**),
- University of Maine, **National Center for Geographic Information and Analysis**, (NCGIA),
- University of Maine, **NASA Center of Excellence** in Remote Sensing Applications,
- Technical Chamber of Greece, (**TEE**),