CURRICULUM VITAE

Personal and Contact Details

Name: Athanasios Argyriou

Address (work):   Institute for Mediterranean Studies- FORTH,
                              130, Nikiforou Foka
                              74100, Rethymno, Greece

Nationality: Greek

Date and place of Birth: July 31st, 1980; Amarousio, Athens, Greece

Researcher ID: https://scholar.google.gr/citations?user=455EanAAAAAJ&hl=en

Telephone: +306944432708 (Greece)

E-mail: nasos@ims.forth.gr

Languages :   Greek; fluent spoken/written English and Italian

Education

2012: PhD in Earth and Environmental Sciences, Department of School of Earth & Environmental Sciences, University of Portsmouth, Portsmouth, United Kingdom.

PhD thesis title: ***"A Methodology for the Rapid Identification of Neotectonic Features using GIS and RS: A Case Study from Western Crete, Greece."***

2005: BSc (Hons) in Natural Resources and Environment, Technological Educational Institute of Crete, Chania, Greece.

Research Interests

- Geological, geomorphological and archaeological sites mapping through remote sensing satellite imagery techniques.
- Tectonic geomorphology investigation through the identification of geomorphic indices and quantitative analysis of drainage basins and drainage networks for tectonic setting characterization.
- Development of multi-criteria decision analysis (MCDA) approaches for the solution of earth & environmental science problems and protection/conservation of cultural heritage.

- Natural hazards and risk assessment analysis regarding flooding, erosion, landslide, urbanization and earthquake hazard scenarios using geoinformatics modelling and remote sensing.
- Applications of object based image analysis (OBIA) approaches for the determination of land use/cover changes, urban, landscape planning, forest mapping, infrastructure, geophysical prospections interpretation and other geospatial information aspects.
- Lineament analysis of satellite imagery using integrated remote sensing and GIS technologies.
- Geomorphometric analysis of DEMs using GIS software packages (e.g. ArcGIS Spatial Analyst, ArcGIS Geostatistical Analyst, ArcGIS 3D Analyst, ArcGIS Model Builder, ArcGIS Network Analyst, Quantum GIS).
- Archaeological landscape and predictive modelling analysis using GIS and remote sensing approaches to assess and identify archaeological sites and evaluate their development versus the landscape evolution.
- Application of several geophysical methods for water resources and fault lineament detection (e.g. very low frequency method, electromagnetic method, electrical resistivity tomography).
- Geophysical investigation of archaeological sites using various geophysical prospection methods, such as ground-penetrating radar (e.g. Noggin GPR), electrical resistivity tomography (e.g. Iris-Syscal Pro), resistance surveys (e.g. RM85-Geoscan), magnetic surveys (e.g. Sensys, Bartington).
- Any relevant section related to Geographical Information Systems (GIS) and remote sensing computational methods interest, regarding pre-processing of multiple datasets of various coordinates systems, image data processing, spatial data management, spatial statistics, statistical analysis, surface modelling, change detection, classification techniques, planning working solutions, network analysis using geographic network datasets, data manipulation and analysis.
- Differential Global Position System (DGPS) and Real-Time Kinematic (RTK-GPS) data capture surveys for the creation of maps and cartographical products of archaeological sites, geological and geotechnical needs.
- Laser scanning data capture surveys (e.g. Faro) and point cloud data processing with software packages, such as FaroScene and PhotoSCAN, for photogrammetric purposes.
- Spectroradiometer ground data collection and spectral signatures analysis for the calibration of remote sensing imagery applications to agricultural, archaeological and environmental studies.
- Google Earth Engine-GEE scripting (using Javascript, Python) to provide GIS and Remote Sensing algorithm procedures to diverse geosciences applications.
- Years of experience of geospatial analysis system software's: ArcGIS Desktop (e.g. ArcGIS Spatial Analyst, ArcGIS Geostatistical Analyst, ArcGIS Data Management, ArcGIS Spatial Statistics, ArcGIS 3D Analyst, ArcGIS Model Builder), ArcGIS Online, ERDAS Imagine, ER Mapper, ENVI, PCI Geomatica, MapInfo, GRASS, Quantum GIS, Surfer, 3DEM, MapWindow GIS, TNTmips, SAGA and other *open-source GIS/Remote Sensing* packages (FOSS).
- Years of experience of geophysical analysis instrumentation and software's: *Geophysical Instruments*: Sensys Multichannel Cart based Gradiometer, Grad601, RM85, GEM-2, CMD Mini Profiler, Syscal Pro, Noggin Plus;

Geophysical software's: Surfer, GPP, Geoplot, EKKO Project, GPR-Slice, Grad601, Res2DInv, DLMGPS-SENSYS, MAGNETO-SENSYS.

Appointments:
Staff or Member of Research Centres

07/2018- up to date: Post-doc researcher at the Lab of Geophysical-Satellite Remote Sensing and Archaeoenvironment (GeoSat Research Group), Rethymno, Greece.

04/2018- 07/2018: Consultant GIS Assistant in the United Nations Global Service Centre (UNGSC), Client Solutions Delivery Section (CSDS), Analytics Unit, Brindisi, Italy.

09/2014- up to date: Visiting Lecturer at School of Earth and Environmental Sciences, University of Portsmouth, UK.

06/2014- 04/2018: Post-doc researcher at the Lab of Geophysical-Satellite Remote Sensing and Archaeoenvironment (GeoSat Research Group), Rethymno, Greece.

10/2013- 05/2014: Senior research associate of Centre for Applied Geosciences, University of Portsmouth, UK.

06/2013- 09/2013: Research assistant of Lab of Geophysical-Satellite Remote Sensing and Archaeoenvironment (GeoSat Research Group), Rethymno, Greece.

09/2007- 05/2013: Research assistant of Centre for Applied Geosciences, University of Portsmouth, UK.

09/2004- 09/2009: Research assistant of Centre for Technological Research of Crete (CTR-Crete) in: i) the Geo-Informatics laboratory and; ii) the Geophysics & Natural Hazards laboratory, Technological Educational Institute of Crete, Greece.

09/2003-06/2004: Research assistant of the laboratory of remote sensing of environment, Department of Environmental Engineering and Physics (DIFA), University of Basilicata, Potenza, Italy.

09/2003-06/2004: Research assistant of the SEISMASS (Seismic Area Monitoring By Advanced Satellite Systems) team and the Robust Satellite Techniques (RST) for Hazard Investigation laboratory, Institute of Methodologies for Environmental Analysis (IMAA/CNR), Tito Scalo (Potenza), Italy.

Honours and Awards

- The paper *Argyriou et al.*, 2016, "*GIS multi-criteria decision analysis for assessment and mapping of neotectonic landscape deformation: A case study from Crete*", was granted to the Science Direct Top 10 list of "Hot Articles" for Earth and Planetary Sciences/Geomorphology (October to December 2015). http://top25.sciencedirect.com/…/geomo…/0169555X/archive/67/

- Scholarship granted from the Greek state's scholarship foundation (I.K.Y) in 2007 for PhD doctoral research.

Publication list:
Research Papers, Monographs

Published research manuscripts in peer-reviewed journals, newsletters and published proceedings:

2019:
- Ravankhah, M., De Wit, R., **Argyriou, A.V.,** Chliaoutakis, A., Joao Revez, M., Birkmann, J., Zuvela-Aloise, M., Sarris, A., Tzigounaki, A., Giapitsoglou, K. (2019): Integrated assessment of natural hazards, including climate change's influences, for cultural heritage sites: The case of the historic centre of Rethymno in Greece. *International Journal of Disaster Risk Science*, Vol. 10, Issue 3, pp. 343-361. (Impact factor: ~2.16)
- Papadopoulos, N., Oikonomou, D., **Argyriou, N**., Kritikakis, G, Limneos-Papakosta, C. (2019): 3-D electrical resistivity tomography in an urban environment: the case of Shallalat Gardens, Alexandria, Egypt. In James Bonsall (Eds) *"13th International conference on archaeological prospection- New global perspectives on archaeological prospection"* proceedings, Archaeopress, 28 August-1 September 2019, Sligo, Ireland, pp. 173-176.

2017:
- **Argyriou A.V.,** Teeuw R.M, Soupios P. & Sarris A. (2017): Neotectonic control on drainage systems: GIS-based geomorphometric and morphotectonic assessment for Crete, Greece. *Journal of Structural Geology*, Vol. 104, pp. 93-111. (Impact factor: ~2.4)
- **Argyriou A.V.,** Teeuw R.M & Sarris A. (2017): GIS-based landform classification of Crete Island. *PLOS ONE*, Vol. 12 (2), pp. 1-23. (Impact factor: ~2.8)
- **Argyriou A. V**. & Sarris A. (2017): Geoinformatic approaches to assess the landform characteristics of Minoan settlements and characterize the water management planning in Bronze Age Crete. In "*Digital Pasts for the present*, Proceedings of 2nd Computer Applications and Quantitative Methods in Archaeology (CAA)", 20-21 December, 2016, Athens, Greece, pp. 51-56.
- Papadopoulos, N., Beck, J., Simyrdanis, K., Cantoro, G., **Argyriou N.**, Nikas, N., Kalayci, T., Koutsoumpa, D. (2017): Ultra Shallow Marine Geophysical Prospection in the Prehistoric Site of Lambayanna, Greece. In Jennings et al (Eds) "*12th International Conference of Archaeological Prospection*" proceedings, Archaeopress, 12th-16th September 2017, Bradford, United Kingdom, pp.172-174.

2016:
- **Argyriou A.V.,** Sarris A. & Teeuw R.M. (2016): Using geoinformatics and geomorphometrics to quantify the geodiversity of Crete, Greece. *International Journal of Applied Earth Observation and Geoinformation*, Vol. 51, pp. 47-59. (Impact factor: ~3.93)
- **Argyriou A. V.,** Teeuw R.M., Rust D. & Sarris A. (2016): GIS multi-criteria decision analysis for assessment and mapping of neotectonic landscape deformation: A case study from Crete. *Geomorphology*, Vol. 253, pp. 262-274. (Impact factor: ~2.96)

2015:
- Agapiou A., Lysandrou V., Alexakis D.D., Themistocleous K., Cuca B., **Argyriou A.,** Sarris A. & Hadjimitsis D.G. (2015): Cultural heritage

management and monitoring using remote sensing data and GIS: The case study of Paphos area, Cyprus. *Computers, Environment and Urban Systems*, Vol. 54, pp. 230–239. (Impact factor: ~2.66)

- Moffat, I., Papadopoulos, N., Donati, J., Sarris, A., Kalayci, T., Cuenca-García, C., Cantoro, G., **Argyriou, N**., Armstrong, K., Kalogiropoulou, E., Manataki, M., Simon, F.X., Karapanagiotou, A.V., and Hadji-Spiliopoulou, G., (2015): Multi-component geophysical survey at the Classical Greek cities of Mantinea and Elis. *Antiquity*, Project Gallery articles, 345, pp. 1-4. (Impact factor: ~1.53)

- Cantoro, G., Papadopoulos, N., **Argyriou, N.,** Armstrong, K., Cuenca-García, C., Donati, J., Kalayci, T., Moffat, I., Sarris, A., and Simon, F.X. (2015): Satellite, Aerial and Low-Altitude approach for Ancient Greek Cities. *International Society for Archaeological Prospection* (*ISAP*) Newsletter, Issue 42, March 2015, pp. 3-6.

- Papadopoulos, N., Moffat, I., Donati, J., Sarris, A., Kalayci, T., Cantoro, G., **Argyriou, N.,** Armstrong, K., Simon, F-X., (2015): Geophysical Mapping of a Classical Greek Road Network: A Case Study from the City of Elis, Peloponnese. *Archaeologia Polona Journal*, volume 53, pg. 121-124.

2014:

- **Argyriou A. V**., Sarris A., Alexakis D., Agapiou A., Themistocleous K., Lysandrou V., Hadjimitsis D. (2014): Hazard analysis of active tectonics through geomorphometric parameters to cultural heritage conservation. The Case of Paphos in Cyprus. In "*Proceedings SPIE* of the Second International Conference on Remote Sensing and Geoinformation of Environment (RSCy2014)", 7-10 April, 2014, Paphos, Cyprus.

2013:

- **Argyriou N.** & Teeuw R. (2013): SRTM-based geomorphometrics for detecting neotectonic deformation: A cost-effective alternative to InSAR in vegetated regions?, In "*Proceedings SPIE* of the First International Conference on Remote Sensing and Geoinformation of the Environment (RSCy2013)", 8-10 April 2013, Paphos, Cyprus.

Book chapters:

- **Argyriou, A.V**., Sarris, A. & Teeuw, R.M. (2015): Geomorphometry, Multi-Criteria Decision Analysis and Archaeological Risk Assessment. In Sarris, A., (Ed.) "*Best Practices of GeoInformatic Technologies for the Mapping of Archaeolandscapes"*, pp. 171-180.

- **Argyriou**, A.V., (2015): Innovative approaches to social aspects of climate change and water management. Use of Geographical Information Systems (GIS) as an innovative approach to our lives. In Kawalec, P. & Wierzchoslawski, R.P., "*Social responsibility and science in innovation economy*", pp. 305-334.

International Conferences

Refereed conferences

Main author:

- **Argyriou A. V** (2019): Digital archaeological maps and applications of GIS in cultural domain. -Oral- In Seismic summer school, "*Face on seismic risk assessment of heritage buildings with remote sensing*", 17-27 June, 2019, Nicosia, Cyprus.

- **Argyriou A. V**, Kidonakis A., Sarris A., Lappa D. (2017): Nicosia in the 20th century: the story of a shared and contested city. –Poster- In "*Cultural Heritage and New Technologies- CHNT 22, Urban Archaeology and Data, Combining archaeology, history and new technologies*", November 8-10, 2017, Vienna, Austria.

- **Argyriou A. V**. & Sarris A. (2016): Geoinformatic approaches to assess the landform characteristics of Minoan settlements and characterize the water management planning in Bronze Age Crete. –Oral- In "2nd Computer Applications and Quantitative Methods in Archaeology (CAA)", 20-21 December, 2016, Athens, Greece.

- **Argyriou A. V**., Teeuw R. M., Sarris A. (2016): Seismic risk assessment based on Open Source satellite imagery, global DEMs, geomorphometrics and Multi-Criteria Decision Analysis. A case study from Crete, Greece. –Oral- In "RSPSoc 2016 Annual Conference", 5-8 September, 2016, Nottingham, UK.

- **Argyriou A. V**., Sarris A., Teeuw R. M. (2015): The influence of landforms and geodiversity in the settlement patterns of Bronze Age Crete. –Oral- In "The Geoarchaeology of Mediterranean Islands. Multidisciplinary approaches to paleoenvironmental changes and the history of human occupation in the Mediterranean islands since the Last Glacial Maximum", 30 June-2 July, 2015, Cargese, France.

- **Argyriou A. V**., Sarris A., Teeuw R. M. (2015): Assessment of active tectonics by quantifying geomorphological, geological and morphotectonics aspects. The case of Crete island, Greece. –Poster- In "36th International Symposium on Remote Sensing of Environment (ISRSE)", 11-15 May, 2015, Berlin, Germany.

- **Argyriou A. V**., Sarris A., Teeuw R. M. (2014): GIS-based quantification of the geodiversity of Crete, Greece, using geomorphological, landcover and geological attributes. -Poster- "GRSG Silver Anniversary Conference 2014, 25 Years of Geological Remote Sensing", 15th-17th December 2014 at the Geological Society of London.

- **Argyriou A. V**., Sarris A., Alexakis D., Agapiou A., Themistocleous K., Lysandrou V., Hadjimitsis D. (2014): Hazard analysis of active tectonics through geomorphometric parameters to cultural heritage conservation. The Case of Paphos in Cyprus. –Oral- In *Proc. SPIE,* Second International Conference on Remote Sensing and Geoinformation of Environment (RSCy2014), 7-10 April, 2014, Paphos, Cyprus

- **Argyriou N.** & Teeuw R. (2013): SRTM-based geomorphometrics for detecting neotectonic deformation: A cost-effective alternative to InSAR in vegetated regions? , –Oral- In *Proc. SPIE*, First International Conference on Remote Sensing and Geoinformation of the Environment (RSCy2013), 8-10 April 2013, Paphos, Cyprus.

- **Argyriou N.**, Teeuw R. & Rust D. (2012): Detecting neotectonic deformation in landscapes using freely-available satellite data and geomorphometrics. –Oral- In

4th EARSel workshop "Geological Applications" proceedings, 24-25 May 2012, Mykonos, Greece.

- **Argyriou N.**, Teeuw R. & Rust D. (2010): Detecting zones of neotectonic activity using freely-available DEMs. –Oral- In "Geo-environmental Remote Sensing" proceedings, Geological Remote Sensing Group Annual General Meeting (GRSG AGM 2010), 1-3 December 2010, Geological Society of London, London, UK.

- **Argyriou N.,** Rust D., Teeuw R. and Vallianatos F. (2008): Geomorphometric analysis of tectonically active landscapes in Crete, Greece, using satellite remote sensing and GIS. –Oral- In *"Measuring change in the Earth system"*, Remote Sensing and Photogrammetry Society Annual Conference 2008 (RSPSoc2008), 15-17 September 2008, University of Exeter, Cornwall Campus, Falmouth, UK.

Co-author:

- Sarris, A., Chliaoutakis A., Argyriou L., **Argyriou A**., Papadopoulos G.N.,Cantono G., Manataki M., Papadopoulos S.N., Oikonomou D., Tzigounaki A., Giapitsoglou K., Kontogianni V., Antonaki P., Karamaliki E., Zouzoula E., Alertas N. (2019): Technological approaches for monitoring the integrity of Historical Monuments: Medieval Towns as a study case. –Oral- In "*International conference on «Cutting-edge technologies in ancient Greece II: the Dodecanese islands under the microscope»"*. University of the Aegean, Rhodes, 11–13 January 2019.

- Ravankhah, M., João Revez, M., De Wit, R., Vaz Pinto, I., **Argyriou, N.,** Hliaoutakis, A.,Brum, P., Žuvela-Aloise, M., Sarris, A.,Birkmann, J., Magalhães, A. P., Pradeep, N., Coghi, P., RestaV. and Boi, S. (2018): A methodological framework to assess disaster risks at cultural heritage sites: the case of the Roman Ruins of Tróia. –Oral- In "*8th International Conference on Building Resilience – ICBR",* Lisbon2018, November 14-16, 2018

- Sarris, A., Chliaoutakis, A., Argyriou, L., **Argyriou, A.,** Papadopoulos, G. N., Cantoro, G., Manataki, M., Papadopoulos S. N., Oikonomou, D., Tzigounaki, A., Giapitsoglou, K., Kontogianni, V., Antonaki, B., Karamanliki, P., Zouzouna, E & Alertas, N. (2018): Towards an Integrated Methodology for the Hazard Assessment and Monitoring of the Monuments of the Town of Rethymno, Crete. –Oral- In "*46th International Conference on Computer Applications and Quantitative Methods in Archaeology*", Tubingen, Germany, March 19th - 23th, 2018

- Ravankhah M., João Revez M., Hliaoutakis A., DeWit R., **Argyriou N**., Žuvela-Aloise M., Sarris A., Birkmann J. (2018): An Indicator-based Approach to Link Vulnerability and Hazard in Risk Assessment for Cultural Heritage Sites. –Poster- In "*International Conference on Natural Hazards and Risks in a Changing World*", University of Potsdam, Germany, 4th and 5th October 2018.

- Sarris A., Kalayci T., Papadopoulos N., **Argyriou N.,** Donati J., Manataki M., Kakoulaki G., Nikas N., Scotton P., Kissas K. (2018): Geophysical explorations of the classical coastal settlement of Lechaion, Peloponnese (Greece). In "*XVIIIe world UISPP Congress*"-Exploring the World's Prehistory, 4-9 June 2018, Paris, France.

- Sarris A., Chliaoutakis A., Argyriou L., **Argyriou N.,** Papadopoulos N., Cantoro G., Manataki M., Papadopoulos N., Oikonomou D., Tzigounaki A., Giapitzoglou K., Kontogianni V., Antonaki V., Karamanliki P., Zouzoula E., Alertas N. (2018): Innovative strategies for the protection and conservation of

the cultural fabric of the historical town of Rethymno, Crete. In "*XVIIIe world UISPP Congress*"-Exploring the World's Prehistory, 4-9 June 2018, Paris, France.

- Papadopoulos, N., Cantoro, G., Theodoulou, T., **Argyriou, N**., Beck, J. (2017): "Dive" in the past of ultra-shallow marine archaeological sites in Eastern Mediterranean through geoinformatics. –Oral- In *Honor Frost Foundation Conference on Mediterranean Maritime Archaeology, Under the Mediterranean*, 19-24 October 2017, Nicosia, Cyprus, Oral presentation by **Argyriou N**.

- Sarris, A., T. Kalaycı, F.-X. Simon, J.C. Donati, I. Moffat, C. Cuenca-Garcia, M. Manataki, G. Cantoro, N. Nikas, **N. Argyriou**, S. Déderix, G. Karampatsou, E. Kalogiropoulou, C. Manzetti, K. Vouzaxakis, V. Rondiri, P. Arachoviti, K. Almatzi, D. Efstathiou & E. Stamelou, (2016): New Perspectives on Neolithic Agricultural Villages in Eastern Thessaly (Greece) Through Remote-Sensing Applications. In "*Archaeological Institute of America and American Philological Association Joint Annual Meeting*", January 8-11 2016, San Francisco, USA.

- Nikos Papadopoulos, Ian Moffat, Jamie Donati, Apostolos Sarris, Tuna Kalayci, Gianluca Cantoro, **Nasos Argyriou**, Kayt Armstrong, François-Xavier Simon (2015): Geophysical mapping of a classical Greek road network: a case study from the city of Elis, Peloponnese. In "*11th International Conference of Archaeological Prospection*", Archaeological Prospection 2015, 15-19 September 2015, Warsaw, Poland.

- Sarris, A., Kalayci, T., Simon, F-X., Donati, J., Cuence-Garcia, C., Manataki, M., Cantoro, G., Karampatsou, G., Kalogiropoulou, E., **Argyriou, N**., Dederix, S., Manzetti, Ch., Nikas, N., Vouzaxakis, K., Rondiri, V., Arxachovity, P., Almatzi, K., Efstathiou, D. and Stamelou, E. (2015): Cultural Variations of the Neolithic Landscape of Thessaly. In "*11th International Conference of Archaeological Prospection*", Archaeological Prospection 2015, 15-19 September 2015, Warsaw, Poland.

- Sarris A., Kalayci T., Simon F., Donati J., Garcia C., Mnataki M., Cantoro G., Kalogiropoulou E., Karampatsou G., **Argyriou N.,** Dederix S., Manzetti C., Nikas N., Vouzaxakis K., Rondiri V., Arachoviti P., Almatzi K., Efstathiou D., Stamelou E. (2015): Opening a new frontier in the Neolithic settlement patterns of eastern Thessaly, Greece. In "*Communities, Landscapes, and Interaction in Neolithic Greece*" conference, 29-30 May 2015, Rethymno, Greece.

- Sarris, A., **Argyriou, N**., Kalayci, T., Simon, F-X., Donati, J., Cuence Garcia, C., Cantoro, G. & Manataki, M. (2015): Neolithic Ditches in Thessaly. –Oral- In "*Third International Conference On Remote Sensing & Geoinformation 2015 (RSCyp2015)*", 16-19 March 2015, Paphos, Cyprus.

- Teeuw, R., Leidig, M. & **Argyriou, N**. (2012): EO & Disaster Risk Reduction in low-income countries: reducing the data poverty gap. In "*2012 NCEO / CEOI Joint Science Conference*", National Centre for Earth Observation, 18-20 September 2012, Nottingham, UK.

- Teeuw R., **Argyriou N**. & Rust D. (2011): Assessing tsunamigenic landslide hazard on a tropical volcanic island. In *"Advances in Geological Remote Sensing (Including the Oil and Gas Earth Observation Group Workshop)",* 7-9 December 2011, ESA/ESRIN, Frascati, Italy.

- Rust, D., Teeuw, R., **Argyriou, N**., Dewdney C. and Solana C. (2010): Assessing volcano flank instability in Dominica, Lesser Antilles arc. In *"Solid*

Earth- Basic Science for the Human Habitat", ILP's (International Lithosphere Program) Second Potsdam Conference 6-8 October 2010, GFZ German Research Centre for Geosciences, Potsdam, Germany.
- Teeuw, R., **Argyriou, N**., Biejat, S., Dilmot, N., Rust, D. and De Roche, T. (2009): Assessing volcano flank instability: Morne Aux Diables, Dominica. In *"Disaster Risk Reduction for Natural Hazards: Putting Research into Practice"*, 4th– 6th November 2009, University College London, UK.

Academic Teaching

01/2019-03/2019:
University of Portsmouth, PTHP Lecturer.
Main responsibilities and duties:
- Training courses on GIS and remote sensing software.

09/2015- 12/2015:
University of Portsmouth, PTHP Lecturer.
Main responsibilities and duties:
- Training courses on GIS and remote sensing software.
- Preparation of ArcGIS and ER Mapper handouts.

01/2015- 05/2015:
University of Portsmouth, PTHP Lecturer.
Main responsibilities and duties:
- Teaching workshop seminars: Digital Geoscience (BSc), Applied GeoInformatics (BSc) and Structural Geology & Geophysics (BSc).
- Training courses on geophysical applications (Seismic refraction, VES, 2D modelling etc) using various software's, such as Excel, IPI2WIN, Surfer, MOVE.

01/2014- 05/2014:
University of Portsmouth, Demonstrator (part-time).
Main responsibilities and duties:
- Teaching workshop seminars: Digital Geoscience (BSc) and Petroleum Engineering (BSc).
- Training courses on geophysical applications.

09/2012- 05/2014:
University of Portsmouth, Demonstrator (part-time).
Main responsibilities and duties:
- Teaching workshop seminars: Digital Mapping (BSc) and Geohazard Data Modelling Techniques for Disaster Management (MSc).
- Training courses on GIS and remote sensing software.
- Preparation of ArcGIS and ERDAS Imagine handouts

01/2012- 06/2012:
University of Portsmouth, Demonstrator (part-time).
Main responsibilities and duties:
- Teaching workshop seminars: Mineral Exploration (BSc) and Digital Geoscience (BSc).
- Training courses on GIS and remote sensing software.
- Preparation of ArcGIS and ERDAS Imagine handouts.

09/2011 – 01/2012:
University of Portsmouth, Demonstrator (part-time).
Main responsibilities and duties:
- Teaching workshop seminars: Spatial Data Acquisition and Analysis (BSc), Digital Mapping for Geoscientists (BSc), Remote Sensing of Environment (BSc), Geohazard Data Modelling Techniques for Disaster Management (MSc).
- Training courses on GIS and remote sensing software.
- Preparation of ArcGIS and ERDAS Imagine handouts.

Private Teaching

10/2017: Lecturing in workshop, organised by Research Centre for the Humanities: "Ματιές στα βουνά της Κρήτης – Views over the Cretan mountains", 3-4 October 2017, Rethymno, Greece.
Main responsibilities and duties:
- Training course on GIS Free Open Source Software (FOSS) of using aerial photographs and GIS applications.
- Preparation of FOSS handouts.

03/2014: Lecturing in workshop seminar: "Geographical Information Sciences for expeditions and fieldwork (RGS-IBG GIS), London, UK".
Main responsibilities and duties:
- GPS measurements and attribute information collection.
- Training course on ArcGIS and GIS Free Open Source Software (FOSS).
- Preparation of ArcGIS and FOSS handouts.

03/2013: Lecturing in workshop seminar: "Geographical Information Sciences for expeditions and fieldwork (RGS-IBG GIS), London, UK".
Main responsibilities and duties:
- GPS measurements and attribute information collection.
- Training course on ArcGIS.
- Preparation of ArcGIS handouts.

03/2012: Teaching in workshop seminar**: "**Geographical Information Sciences for expeditions and fieldwork (RGS-IBG GIS), London, UK".

Main responsibilities and duties:
- GPS measurements and attribute information collection.
- Training course on QGIS.
- Preparation of QGIS handouts.

05/2015: Second session of teaching in workshop seminar held in Athens by DARIAH team of Athens Academy using GIS applications on Arts & Humanities.

Main responsibilities and duties:
- Training course on QGIS with emphasis in Arts & Humanities applications, such as historical, archaeological, sociological, ethnographical etc aspects.

-   Preparation of QGIS handouts

11/2014: Teaching in workshop seminar held in Athens by DARIAH team of Athens Academy using GIS applications on Arts & Humanities.

Main responsibilities and duties:
-   Training course on ArGIS and QGIS with emphasis in Arts & Humanities applications, such as historical, archaeological, sociological, ethnographical etc aspects.
-   Preparation of ArGIS and QGIS handouts.

02/2015: Organising and lecturing in workshop seminar, Restech II, held in Institute of Mediterranean Studies (IMS), Rethymno.
Main responsibilities and duties:
-   Training course on ArGIS and QGIS with emphasis in archaeological applications.

05/2015: Lecturing in workshop seminar held in Lublin (Poland) by John Paul II Catholic University of Lublin, with theme subject: "Social responsibility and science in innovation economy".

Research and Field Experience as a Geophysicist, GIS and Remote Sensing Analyst.

-   **Participation in international and domestic research projects:**

01/2017-04/2018: Research Project: "Safeguarding Cultural Heritage through Technical and Organisational Resources Management (STORM). Mitigating the impacts of climate change and natural hazards on Cultural Heritage sites, structures and artefacts. This project has received funding from the European Union's Horizon 2020 research and innovation programme".
– *Main responsibilities and duties*: Application of geoinformatic approaches to assess the natural hazards risk, the exposure and vulnerability assessment over cultural heritage sites. Participation in various meetings to determine the best strategy of mitigation for the impacts of climate change and natural hazards on cultural heritage sites. Conducting reports with regard to the involved work packages requirements.

06/2016- 04/2017: Applications of Key Enabling Technologies (AKET). Project: monitoring and modeling of natural environment and resources. WP: history of the water resources management: the case of Crete. Programmatic agreements between Research Centres - GSRT 2015-2017" in the framework of the Hellenic Republic – Siemens Settlement Agreement. General Secretariat for Research and Technology (GSRT) 2 years.

– *Main responsibilities and duties*: Manipulation of historical water resources datasets, DEM analysis and derivatives advantageous to water resources management, landform type's extraction, identification of routes linking settlements to water resources.
07/2015-12/2015: "Nicosia: The story of a shared and contested city", implemented by the Association for Historical Dialogue and Research (AHDR).
– *Main responsibilities and duties*: Manipulation of historical maps, 1878 to 1974, (processing, georeferencing etc), historical demographic dataset imported into GIS

environment, analysis of various religious demographics through the years regarding political events, communication of the outcomes through Web-GIS services.

06/2014- 07/2015: Research Project: «Application of Novel Geo-Information Technologies in Ancient Greek Urban Studies (AncientCity)». Operational Programme «Education and lifelong learning» - Action «ARISTEIA II».

– *Main responsibilities and duties*: Rectification and digitization of plans/maps/drawings, processing of satellite images for identification of archaeological interest features, fusion of geophysical/satellite data, GIS spatial analysis of the outcomes, participation in a number of fieldwork activities in Greece, delivery of lectures in international seminars, active participation in the publications of the project's results in international peer reviewed journals and conferences.

06/2014- 07/2015: Research Project: "Recapturing the Dynamics of the Early-Byzantine Settlements in Crete: New Interpretations through an Interdisciplinary Approach". Operational Programme «Education and lifelong learning». Action «ARISTEIA II».

– *Main responsibilities and duties*: Participant of the research team. Manipulating data in GIS. Providing mapping support and offering GIS working solutions based on needed requirements. Acquisition of geophysical measurements for archaeological aspects.

06/2014- 01/2015: Research Project: "Culture-Technology: New technologies in research, study, documentation and accessibility in the information of items and monuments of cultural heritage". Operational Programme «Competitiveness and Entrepreneurship» (OPCE II) – Action «KRIPIS – POLITEIA»

– *Main responsibilities and duties*: Participant of the research team. Manipulating data in GIS. Providing mapping support and offering GIS working solutions based on needed requirements. Acquisition of geophysical measurements for archaeological aspects.

06/2014- 12/2014: Research Project: "Innovative Geophysical Approaches for the Study of Early Agricultural Villages of Neolithic Thessaly" – IGEAN. Operational Programme «Education and lifelong learning». Action «ARISTEIA I».

– *Main responsibilities and duties*: Participant of the research team. Manipulating data in GIS. Processing of satellite images for identification of archaeological interest features. Providing mapping support and offering GIS and remote sensing working solutions based on needed requirements. Acquisition of geophysical measurements for archaeological aspects.

10/2013-02/2014: Second phase of project: "GIS mapping of hydrogeology & geo-ecological features, Sierra Leone". Project under partnership of Department for International Development (DfID) and Adam Smith International Ltd., UK.

– *Main responsibilities and duties*: Manipulating data in GIS for groundwater potential aspects (e.g. pre-processing of multiple datasets of various coordinates systems, spatial data management and geoprocessing). Providing mapping production and offering GIS working solutions based on needed requirements. Preparing several FOSS GIS handouts for the training of partnership staff in Sierra Leone.

06/2013-09/2013: "Risk assessment analysis over archaeological sites regarding natural hazards, Cyprus". "Archaeolandscapes Europe" project, Institute for Mediterranean Studies (IMS)-FORTH, Greece.

– *Main responsibilities and duties*: Analysis of DEMs and satellite imagery to retrieve geomorphometric/morphotectonic information to be applied in risk assessment analysis over archaeological sites regarding natural hazards such as seismic, flooding and landslide. Acquisition of geophysical measurements for archaeological aspects.

12/2012-10/2013: "Satellite remote sensing & image processing of oil pipelines, Nigeria". Integrix Consultants Ltd, UK.

– *Main responsibilities and duties*: Satellite image processing and interpretation, manipulating data in GIS (e.g. pre-processing of multiple datasets (optical and radar imagery) of various coordinates systems, spatial data management, geoprocessing) and provide mapping production. Offering object based image analysis (OBIA) and other remote sensing working solutions based on needed requirements, such as land cover/use changes and artisan oil refinery activities.

06/2012-03/2013: "GIS mapping of hydrogeology & geo-ecological features, Sierra Leone". Project under partnership of Department for International Development (DfID) and Adam Smith International Ltd., UK.

– *Main responsibilities and duties*: satellite image processing and interpretation, manipulating data in GIS (e.g. pre-processing of multiple datasets of various coordinates systems, spatial data management and geoprocessing) and provide mapping production. Offering GIS working solutions based on needed requirements.

07/2009-08/2009: "North Dominica Geohazards": VLF survey of fracture zones on an unstable volcanic flank, post-processing of data and plotting of results, University of Portsmouth, UK.

– *Main responsibilities and duties*: satellite image processing and interpretation, manipulating data in GIS (e.g. pre-processing of multiple datasets of various coordinates systems, spatial data management and geoprocessing), provide mapping production and acquisition of geophysical (VLF) measurements. Offering working solutions based on needed requirements.

09/2008: "Geophysical mapping of the archaeological site of Kiato", Laboratory of Geophysics, Satellite Remote Sensing and Archaeoenviroment, Institude of Mediterranean Studies, Foundation of Research and Technology, Crete.

– *Main responsibilities and duties*: acquisition of geophysical measurements (e.g. ground-penetrating radar, geoelectrical tomography, magnetic surveys).

01/2008-06/2008: "Methodology Integration of EO techniques as operative tool for Land Degradation MAnagement and Planning in MEDIterranean Areas (MILDMAP – MEDIA) - EU Community Initiative Programme INTERREG III B ARCHIMED, 2000-2006, European Regional Development Fund - E.R.D.F, Research Project No. A.1.020 [1/6/2006-31/10/2008]", Leader Partner: Basilicata region – Dept. of Environment and Sustainable Policy - Italy.

– *Main responsibilities and duties*: satellite image processing and interpretation, manipulating data in GIS (e.g. spatial data management and geoprocessing) and provide mapping production.

07/2007-03/2008: ""Integrated System for Seismic Hazard Monitoring and Treatment at the front of the Hellenic Arc. Application to the cities Chania & Heraklion, Crete.", TALOS project, 3rd Community Support Framework (2000-2006), European Regional Development Fund - E.R.D.F., General Secretariat for Research and Technology.

– *Main responsibilities and duties*: seismic and geophysical acquisition measurements.

01/2008-09/2008: "Advanced techniques for SEismic RISK reduction in Mediterranean Archipelago Regions (SE-RISK) - EU Community Initiative Programme INTERREG III B ARCHIMED, 2000-2006, European Regional Development Fund- E.R.D.F., Research Project No.A.1.034, [1/6/2006-31/10/2008]", Leader Partner: Technological Educational Institute of Crete – Greece.

– *Main responsibilities and duties*: seismic and geophysical acquisition measurements.

06/2007-07/2007: "Multiparametric time-spatial estimation of seismic hazards in the forehead of the Greek arc. Application in the protection of old Venetian port of

Chania", Archimedes project (ΕΠΕΑΕΚ 2004-2006). Research Sub-Project No 2.2.15 [1/4/2004-31/12/2007] of the of the Research Project Archimedes: "Support of Research Teams of Technological Educational Institute of Crete", in the frame of Operational Programme for Education and Initial Vocational Training (O.P. "Education") one of the Third Community Support Framework's 24 Operational Programmes (2000-2006) in Greece, co-financed by the European Social Fund, the European Regional Development Fund and national resources.

– *Main responsibilities and duties*: seismic and geophysical acquisition measurements.

09/2003-06/2004: "The SEISMASS (Seismic Area Monitoring By Advanced Satellite Systems) project: Long-term satellite data analysis and ground based experiments to assess the potential of satellite TIR surveys for present and incoming satellite systems.", Department of Environmental Engineering and Physics (DIFA), University of Basilicata, Potenza, Italy.

– *Main responsibilities and duties*: Remote sensing techniques application for satellite image processing and interpretation, manipulating data in GIS (e.g. spatial data management and geoprocessing) and provide mapping production.

- **Field experience**

09/2019: Geophysical fieldwork of an archaeological site in Poros, Greece (e.g. ground penetrating radar and magnetic surveys). Collaboration between Swedish Institute at Athens & Laboratory of Geophysical - Satellite Remote Sensing & Archaeo-environment, Institute for Mediterranean Studies (I.M.S.) / Foundation of Research & Technology (F.O.R.T.H.), Greece.

09/2019: Geophysical fieldwork of archaeological sites in Tithorea, Greece (e.g. ground penetrating radar and magnetic surveys). Collaboration between German School of Athens & Laboratory of Geophysical - Satellite Remote Sensing & Archaeo-environment, Institute for Mediterranean Studies (I.M.S.) / Foundation of Research & Technology (F.O.R.T.H.), Greece.

08/2019: Geophysical fieldwork of Neolithic archaeological sites in eastern Hungary (magnetic surveys). Collaboration between the Centre for National Heritage Protection, Hungarian National Museum, Hungary & Laboratory of Geophysical - Satellite Remote Sensing & Archaeo-environment, Institute for Mediterranean Studies (I.M.S.) / Foundation of Research & Technology (F.O.R.T.H.), Greece.

12/2018: Geophysical fieldwork of archaeological sites in Pella, Greece (e.g. ground penetrating radar and magnetic surveys). Collaboration between Archaeological Museum of Pella & Laboratory of Geophysical - Satellite Remote Sensing & Archaeo-environment, Institute for Mediterranean Studies (I.M.S.) / Foundation of Research & Technology (F.O.R.T.H.), Greece.

10/2018: Geophysical fieldwork of archaeological sites in Tithorea, Greece (e.g. ground penetrating radar and magnetic surveys). Collaboration between German School of Athens & Laboratory of Geophysical - Satellite Remote Sensing & Archaeo-environment, Institute for Mediterranean Studies (I.M.S.) / Foundation of Research & Technology (F.O.R.T.H.), Greece.

12/2017: Geophysical fieldwork of archaeological sites in Eidomeni, Greece (e.g. ground penetrating radar and magnetic surveys). Laboratory of Geophysical - Satellite Remote Sensing & Archaeo- environment, Institute for Mediterranean Studies (I.M.S.) / Foundation of Research & Technology (F.O.R.T.H.), Greece.

12/2017: Geophysical fieldwork of archaeological sites in Pella, Greece (e.g. ground penetrating radar, electric resistivity and magnetic surveys). Laboratory of Geophysical

- Satellite Remote Sensing & Archaeo- environment, Institute for Mediterranean Studies (I.M.S.) / Foundation of Research & Technology (F.O.R.T.H.), Greece.

11/2017: Geophysical fieldwork (electrical resistivity tomography) on Shallalat Gardens, Alexandria, Egypt. Laboratory of Geophysical - Satellite Remote Sensing & Archaeo- environment, Institute for Mediterranean Studies (I.M.S.) / Foundation of Research & Technology (F.O.R.T.H.), Greece in collaboration with the Hellenic Research Institute of the Alexandrian Civilization (HRIAC).

07/2017: Maritime geophysical fieldwork of archaeological sites in Lambayianna, Greece, 2nd year survey. Collaboration between Swiss School of Archaeology of Athens & Laboratory of Geophysical - Satellite Remote Sensing & Archaeo- environment, Institute for Mediterranean Studies (I.M.S.) / Foundation of Research & Technology (F.O.R.T.H.), Greece.

06/2017: Geophysical fieldwork of archaeological sites in Lechaion, Greece (e.g. ground penetrating radar, electric resistivity and magnetic surveys), 2nd year survey, Laboratory of Geophysical - Satellite Remote Sensing & Archaeo- environment, Institute for Mediterranean Studies (I.M.S.) / Foundation of Research & Technology (F.O.R.T.H.), Greece.

11/2016: Geophysical fieldwork of Neolithic archaeological sites in eastern Hungary (magnetic surveys). Collaboration between the Centre for National Heritage Protection, Hungarian National Museum, Hungary & Laboratory of Geophysical - Satellite Remote Sensing & Archaeo-environment, Institute for Mediterranean Studies (I.M.S.) / Foundation of Research & Technology (F.O.R.T.H.), Greece.

07/2016: Maritime geophysical fieldwork of archaeological sites in Lambayianna, Greece. Collaboration between Swiss School of Archaeology of Athens & Laboratory of Geophysical - Satellite Remote Sensing & Archaeo- environment, Institute for Mediterranean Studies (I.M.S.) / Foundation of Research & Technology (F.O.R.T.H.), Greece.

06/2016: Geophysical fieldwork of archaeological sites in Lechaion, Greece (e.g. ground penetrating radar, electric resistivity and magnetic surveys). Laboratory of Geophysical - Satellite Remote Sensing & Archaeo- environment, Institute for Mediterranean Studies (I.M.S.) / Foundation of Research & Technology (F.O.R.T.H.), Greece.

05/2015: Geophysical fieldwork of archaeological sites in Orchomenos, Boetia, Greece, using various geophysical methods (e.g. ground penetrating radar, electric resistivity and magnetic surveys), Laboratory of Geophysical - Satellite Remote Sensing & Archaeo- environment, Institute for Mediterranean Studies (I.M.S.) / Foundation of Research & Technology (F.O.R.T.H.), Greece.

05/2015: Geophysical fieldwork of archaeological sites in Thessaly, Greece, using various geophysical methods (e.g. ground penetrating radar, electric resistivity and magnetic surveys), Laboratory of Geophysical - Satellite Remote Sensing & Archaeo-environment, Institute for Mediterranean Studies (I.M.S.) / Foundation of Research & Technology (F.O.R.T.H.), Greece.

11/2014: Geophysical fieldwork of archaeological sites in Peloponnese, Greece, using various geophysical methods (e.g. ground penetrating radar, electric resistivity and magnetic surveys), Laboratory of Geophysical - Satellite Remote Sensing & Archaeo-environment, Institute for Mediterranean Studies (I.M.S.) / Foundation of Research & Technology (F.O.R.T.H.), Greece.

08/2014: Geophysical prospection of archaeological sites in Thessaly, Greece, using various geophysical methods (e.g. ground penetrating radar, electric resistivity and magnetic surveys), of Magoules archaeological sites in Thessaly, Greece. Laboratory

of Geophysical - Satellite Remote Sensing & Archaeo- environment, Institute for Mediterranean Studies (I.M.S.) / Foundation of Research & Technology (F.O.R.T.H.), Greece.

08/2013: Geophysical investigation, using various geophysical methods (e.g. ground penetrating radar and magnetic surveys), of Trapeza archaeological site in Aigio, Greece, Laboratory of Geophysical - Satellite Remote Sensing & Archaeo-environment, Institute for Mediterranean Studies (I.M.S.) / Foundation of Research & Technology (F.O.R.T.H.), Greece.

07/2009-08/2009: Very Low Frequency (VLF) survey, Morne aux Diables volcano, Dominica (part of a University of Portsmouth expedition)

09/2008: Geophysical investigation, using various geophysical methods (e.g. ground-penetrating radar, geoelectrical tomography, magnetic surveys), of an archaeological site in Kiato, Greece, Laboratory of Geophysical - Satellite Remote Sensing & Archaeo-environment, Institute for Mediterranean Studies (I.M.S.) / Foundation of Research & Technology (F.O.R.T.H.), Greece.

09/2005-09/2009: Geophysical measurements around Crete, Geophysics & Natural Hazards Laboratory, Technological Educational Institute of Crete, Greece.

09/2003-06/2004: Fieldwork training on field, as a geophysicist and remote sensing analyst, in the Institute of Methodologies for Environmental Analysis (IMAA/CNR) and University of Basilicata, Italy.

Reviewer in peer-reviewed journals and research proposals

- *International Journal of Applied Earth Observation and Geoinformation*
- *ISPRS International Journal of Geo-Information*
- *Geomorphology*
- *Journal of Hydrology*
- *Journal of Maps*
- *Journal of Environmental Monitoring and Assessment*
- *Journal of Land*
- *Sustainability Journal*
- *NERC, Science for the Environment*
- *Revista Ambiente & Água*
- *Land Use Policy*
- *Quaternary International*
- *Natural Hazards*

Organisation of International conferences and fieldworks

- Active participation on the organization of the "1st REmote Sensing Technologies in Cultural Heritage Workshop (RESTECH I)", 17th-28th February 2014 and "2nd REmote Sensing Technologies in Cultural Heritage Workshop (RESTECH II)", 9th-20th February 2015 organized by the Laboratory of Geophysical-Satellite Remote Sensing & Archaeoenvironment, IMS, Crete, Greece.
- Active participation on the organization of the international conference "Communities, Landscapes and Interaction in Neolithic Greece", 29-30 May

2015, organized by the Laboratory of Geophysical-Satellite Remote Sensing & Archaeoenvironment, IMS, Crete, Greece.

- Active participation on the organization of fieldwork geophysical surveys in Greece and Dominica in Caribbean region.

International research cooperation

Greece: Institute for Mediterranean Studies (I.M.S.), Technological Educational Institute of Crete (TEI Crete), Benaki Phytopathological Institute.

UK: University of Portsmouth, Fugro NPA Ltd, Geological Remote Sensing Group (GRSG).

Cyprus: Technological University of Cyprus (TEPAK).

Italy: Institute of Methodologies for Environmental Analysis (IMAA/CNR), University of Basilicata.

Supervising, mentoring activities

- Supervision and mentored activities of students on geoinformatic applications on archaeology, during an exchange of students, funded by a Marie Currie fellowship, which took place in the Institute of Mediterranean Studies (IMS) in 2014-2015.

Workshops

Attended "Postgraduates who teach Geography, Earth and Environmental Science (GEES)" workshop, 5th November 2012, Higher Educational Academy, Royal Geographical Society, London, UK.

Academic and Professional Memberships and Qualifications

2008- present: Geological Remote Sensing Group (GRSG), UK

Computer Skills

- Knowledge of geospatial analysis system software's (15 year's experience), such as:
- ArcGIS Desktop (e.g. ArcGIS Spatial Analyst, ArcGIS Geostatistical Analyst, ArcGIS Data Management, ArcGIS Spatial Statistics, ArcGIS 3D Analyst, ArcGIS Model Builder), ArcGIS Online, ERDAS Imagine, ER Mapper, ENVI, PCI Geomatica, MapInfo, GRASS, Quantum GIS, Surfer, 3DEM, MapWindow GIS, TNTmips, SAGA, MATLAB, GIS applications/packages within LINUX environment and other open-source GIS/RS packages (FOSS).

- Experience in programming skills (e.g. Javascript and Python) using Google Earth Engine scripting and the development of various Web-GIS applications and creation of cartographic products using Google Earth Engine, Google maps API, ArcGIS for Server, ArcGIS Online, ArcGIS Portal, QGIS Server.

- Experience in various geophysical software's:
  Surfer, GPP, Geoplot, EKKO Project, GPR-Slice, Grad601, Res2DInv, DLMGPS-SENSYS, MAGNETO-SENSYS.

- Experience in laser scanning data capture (e.g. Faro) and point cloud data processing using software packages such as FaroScene and PhotoSCAN.

- Working knowledge of Windows operating system software's and other software packages such as:
- MS Office, MS PowerPoint, MS Excel, MS Outlook, Adobe Photoshop, Coreldraw, SPSS, SAS, Surfer, MapSource, GPS Utility and Origin.