

Dimitrios Gounaridis

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Education

2018	Ph.D.	Geography	University of the Aegean
2012	M.Sc.	Geography and Applied Geo-informatics	University of the Aegean
2009	B.Sc.	Forest and Natural Environment Sciences	International Hellenic University

Professional Appointments

2018 – Present	Postdoctoral Research Fellow	Urban Sustainability Research Group. School for Environment and Sustainability (SEAS), University of Michigan.
2013 – 2018	Ph.D. Researcher	Spatial Analysis, Geographic Information Systems and Remote Sensing (SAGISRS) lab. Department of Geography, University of the Aegean
3/2017 – 8/2017	Fixed-term contract (private sector)	Aegean Geotechnical. Integrated information system, single application for European Agricultural Fund for Rural Development (EAFRD). Assisting and consulting farmers and beneficiaries on single payment application and crop/breeding declaration along with cadastral registrations and updates.
5/2014 – 8/2014	Teaching assistant	Aegean Research Unit, fixed term contact. Teaching assistant in undergraduate and graduate level (see teaching experience).
8/2009 – 10/2009	Internship assistant (private sector)	Forest Techniques Office i) Bird migration study in Malta using statistical analysis, ii) ARTEMIS project, estimating harvesting and species distribution of wild life in Greece.
4/2009 – 7/2009	Internship assistant	Protection of Natural Terrestrial Ecosystems, Laboratory. Department of Forestry and Natural Environment Management. International Hellenic University.

Honors and Awards

- 2018** **H2020 Marie Skłodowska-Curie Actions Seal of Excellence**, high-quality label awarded to project proposal (score received 88,80%)
- 2013** **Scholar of the Greek State Scholarships Foundation**, Ph.D studies
- 2011** **Scholar of the ERASMUS Lifelong Learning Program**. GISLERS Summer School, Z_GIS Department of Geoinformatics, Salzburg, Austria
- 2010** **Scholar of the Greek State Scholarships Foundation**, MSc studies. First place in written competition (courses: Forest Policy and Economics, Forest Biometrics, Forest Management)

Research funding

- 2022 – 2023** Role: **Co-PI**: Mapping Community Vulnerability to Climate Change. School for Environment and Sustainability Themes Funds 2022. Amount: \$70.000.
- 2021 – 2022** Role: **Co-I**: Using Geospatial Data Science to Identify Vulnerable Communities to Climate Change. Michigan Institute for Data Science (MIDAS) Propelling Original Data Science (PODS). Amount: \$70.000.
- 2019 – 2021** Role: **Co-PI**: Expanding green infrastructure as a response to environmental injustice and climate change. USDA NIFA McIntire-Stennis Research Program 2019, award number: NI20MSCFRXXXG025. Amount: \$150,000.
- 2018 – Present** Role: **Postdoctoral Research Fellow**: i) Sustainability Research Network (SRN): Integrated Urban Infrastructure Solutions for Environmentally Sustainable, Healthy and Liveable Cities. National Science Foundation (NSF), award number: 1444745. ii) The Sustainability Hoofprint of Cities: A Spatial Model to Assess Transboundary Urban Consumption. National Science Foundation (NSF), award number: 1805085.
- 2018** Role: **Research Assistant**. Mapping and spatial analysis of tea plantations in Ningde UNESCO Global Geopark, China using remote sensing techniques. Code: 2542.
- 2015 – 2016** Role: **Research Assistant**. FP7 – Sustainable Futures for Europe's Heritage in Cultural Landscapes: Tools for understanding, managing, and protecting landscape functions and values – HERCULES. Code: 2542.
- 2015** Role: **Research Assistant**. FP7 Total costs of climate changes CLIMATECOST: Mapping urban land cover of coastal Greece, using remote sensing techniques. Code: 2168.
- 2015** Role: **Research Assistant**. Population density grid of Greece, employing spatial analysis methodologies. Aegean Research Unit. Code: 2692.

Publications

Refereed Journal Articles

24. Hawes, J.K., **Gounaridis, D.** and Newell, J.P. (2022). Does urban agriculture lead to gentrification? *Landscape and Urban Planning* 225, 104447.
23. Cho, K., Goldstein, B., **Gounaridis, D.** and Newell, J.P. (2022). Hidden risks of deforestation in global supply chains: A study of natural rubber flows from Sri Lanka to the United States. *Journal of Cleaner Production* 349, 131275.
22. Yang, J., **Gounaridis, D.**, Liu, M., Bi, J., Newell, J. (2021). Perceptions of Climate Change in China. *Earth's Future* 9(12), e2021EF002144.
21. Goodspeed, R., Liu, R., **Gounaridis, D.**, Lizundia, C. and Newell, J. (2021). A Regional Spatial Planning Model for Multifunctional Green Infrastructure. *Environment and Planning B: Urban Analytics and City Science* <https://doi.org/10.1177/23998083211033610>
20. Cho, K., Goldstein, B., **Gounaridis, D.** and Newell, J.P. (2021). Where does your guacamole come from? Detecting deforestation associated with the export of avocados from Mexico to the United States. *Journal of Environmental Management* 278(p1), 111482.
19. **Gounaridis, D.**, Newell, J.P. and Goodspeed, R. (2020). The Impact of Urban Sprawl on Forest Landscapes in Southeast Michigan, 1985-2015. *Landscape Ecology* 35, 1975–1993.
18. Goldstein, B., **Gounaridis, D.** and Newell, J.P. (2020). The Carbon Footprint of Household Energy Use in the United States. *Proceedings of the National Academy of Sciences* 117(32), 19122-19130.
17. Zaimes, N.G., **Gounaridis, D.** and Symeonakis, E. (2019). Assessing the impact of dams on riparian and deltaic vegetation using remotely sensed vegetation indices and Random Forests modelling. *Ecological Indicators* 103, 630-641.
16. **Gounaridis, D.**, Chorianopoulos, I., Symeonakis, E. and Koukoulas, S. (2019). A multi-scale Random Forest/Cellular Automata modelling approach for mapping land use/cover changes in Attica (Greece), under divergent socioeconomic realities. *Science of the Total Environment* 646, 320–335.
15. **Gounaridis, D.**, Symeonakis, E., Chorianopoulos, I. and Koukoulas, S. (2018). Incorporating density in spatio-temporal land use/cover change patterns: the case of Attica, Greece. *Remote Sensing* 10(7), 1034.
14. Kizos, T., Verburg, P.H., Burgi, M., **Gounaridis, D.**, Plieninger, T., Bieling, C. and Balatsos, T. (2018). From concepts to practice: A portfolio of approaches on drivers of landscape change. *Ecology and Society* 23(1), 25-35.

13. **Gounaridis, D.**, Chorianopoulos, I. and Koukoulas, S. (2018). Exploring prospective urban growth trends under different economic outlooks and land-use planning scenarios: The case of Athens. *Applied Geography* 90, 134-144.
12. Garcia-Martin, M., Fagerholm, N., Bieling, C., **Gounaridis, D.**, Kizos, T., Printsman, A., Müller, M., Lieskovský, J. and Plieninger, T. (2017). Participatory mapping of landscape values in a Pan-European perspective. *Landscape Ecology* 32(11), 2133–2150.
11. Dimitrakopoulos, P.G., Koukoulas, S., Galanidis, A., Delipetrou, P., **Gounaridis, D.**, Touloumi, K. and Arianoutsou, M. (2017). Factors shaping alien plant species richness spatial patterns across Natura 2000 Special Areas of Conservation of Greece. *Science of the Total Environment* 601–602, 461–468.
10. Zagaria, C., Schulp, C.J.E., Kizos, T., **Gounaridis, D.** and Verburg, P.H. (2017). Cultural landscapes and behavioral transformations: An agent-based model for the simulation and discussion of alternative landscape futures in East Lesvos, Greece. *Land Use Policy* 65, 26–44.
9. **Gounaridis, D.** and Koukoulas, S. (2016). Urban land cover thematic disaggregation, employing datasets from multiple sources and RandomForests modeling. *International Journal of Applied Earth Observation and Geoinformation* 51, 1–10.
8. **Gounaridis, D.**, Apostolou A. and Koukoulas, S. (2016). Land Cover mapping of Greece: a semi-automated classification approach based on Landsat data and Random Forests. *Journal of Maps* 12(5), 1055-1062.
7. **Gounaridis, D.**, Apostolou A., Riga M., Moustos P., Mpika K., Kontou D. and Koukoulas, S. (2016). Change detection of forests and semi-natural areas in Greece for the period 1990-2010. *Aegean Journal of Environmental Sciences* 2, 1-10.
6. **Gounaridis, D.**, Zaimis, N.G. and Koukoulas, S. (2014). Quantifying spatio-temporal patterns of forest fragmentation in Hymettus Mountain, Greece. *Computers Environment and Urban Systems* 46, 35–44.
5. Iakovoglou, V., Zaimis, N.G. and **Gounaridis, D.** (2013). Riparian Areas in Urban Settings: Two Case Studies from Greece. *International Journal of Innovation and Sustainable Development* 7(3), 271 – 288.
4. **Gounaridis, D.** and Zaimis, N.G. (2012). GIS-based Multicriteria Decision Analysis applied for Environmental Issues. The Greek Experience. *International Journal of Applied Environmental Sciences* 7(3), 307 – 321.
3. Zaimis, N.G., **Gounaridis, D.**, Iakovoglou, V. and Emmanouloudis, D. (2011). Riparian Area Studies in Greece: A Literature Review. *Fresenius Environmental Bulletin* 20 (6a), 1470 – 1477.
2. Zaimis, N.G., **Gounaridis, D.** and Fotakis, D. (2011). Assessing riparian land-uses/vegetation cover along the Nestos River in Greece. *Fresenius Environmental Bulletin* 20 (12), 3217 – 3225.

1. Zaimis, N.G., Iakovoglou, V., Emmanouloudis, D. and **Gounaridis, D.** (2010). Riparian Areas of Greece: Their Definition and Characteristics. *Journal of Engineering Science and Technology Review* 3 (1), 176-183.

Book Chapters

1. Nitis T., Tsegas G., Moussiopoulos N., **Gounaridis D.** (2018) Assimilating Anthropogenic Heat Flux Estimated from Satellite Data in a Mesoscale Flow Model. In: Mensink C., Kallos G. (eds) *Air Pollution Modeling and its Application XXV. ITM 2016*. Springer Proceedings in Complexity. Springer.

Articles in Conference Proceedings

3. Nitis, T., Tsegas, G., Moussiopoulos, N., **Gounaridis, D.** and Bliziotis, D. Satellite data based approach for the estimation of anthropogenic heat flux over urban areas. *Proceedings SPIE*, 104441P. RSCy2017.

2. Zaimis, N.G., **Gounaridis, D.**, Iakovoglou, V. and Emmanouloudis, D. Assessing soil erosion risk for Rhodes Island, Greece with a GIS-based Multi-Criteria Decision Analysis. *Proceedings: The 4th IASTED African Conference on Water Resource Management – Africa WRM*. 3-5 September 2012. Gaborone, Botswana.

1. Iakovoglou, V., Zaimis, N.G. and **Gounaridis, D.** Managing healthy riparian areas in urban settings of Greece to improve living conditions. *Proceedings: Protection and Restoration of the Environment XI*. 3-6 July 2012. Thessaloniki, Greece.

Abstracts in Conference Proceedings

10. **Gounaridis, D.** and Newell, J. Using Geospatial Data Science to Identify Vulnerable Communities to Climate Change. American Association of Geographers annual meeting, 25 February - 1 March 2022. New York City, NY, USA.

9. Hawes, J., **Gounaridis, D.**, Goldstein, B. and Newell, J. Understanding the multi-dimensional effects of urban agriculture at the city-scale: A study of the US and Europe. American Association of Geographers annual meeting, 25 February - 1 March 2022. New York City, NY, USA.

8. **Gounaridis, D.** and Newell, J. How thirty years of sprawl in southeast Michigan has affected farmland and forests. American Association of Geographers annual meeting, 7 - 11 April 2021. Seattle, WA, USA.

7. Goldstein, B., Newell, J., Cho, K. and **Gounaridis, D.** Rubber & Risk: Deforestation related to the export of natural rubber from Sri Lanka. American Association of Geographers annual meeting, 7 - 11 April 2021. Seattle, WA, USA.

6. Cho, K., Goldstein, B., **Gounaridis, D.** and Newell, J. Deforestation associated with supply chains exporting avocados from Mexico to the United States. American Association of Geographers annual meeting, 7 - 11 April 2021. Seattle, WA, USA.

5. **Gounaridis, D.** and Newell, J. Exploring Prospective Pathways to Scale Up Urban Agriculture: The Case of Detroit. American Association of Geographers annual meeting, 3 - 7 April 2019. Washington DC, USA.
4. Nitis, T., Tsegas, G., Moussiopoulos, N., **Gounaridis, D.** and Bliziotis, D. Satellite data based approach for the estimation of anthropogenic heat flux over urban areas. 5th International Conference on Remote Sensing and Geoinformation of Environment, 20 - 23 March 2017. Paphos, Cyprus.
3. **Gounaridis, D.**, Apostolou, A., Riga, M., Moustos, P. and Koukoulas, S. Detecting changes in forest cover of Greece (1990-2010) using Landsat imagery and semi-automatically trained Random Forests algorithm. 7th National Congress of Ecology, 9 - 12 October 2014. Mytilene, Greece.
2. Kalabokidis, K., Palaiologou, P. and **Gounaridis, D.** Analysis of post fire natural regeneration of a Mediterranean forest in the mountainous environment of Lesbos island. 6th National Congress of Ecology, 4 - 7 October 2012. Athens, Greece.
1. Zaimis, N.G., Mallinis, G., **Gounaridis, D.**, Emmanouloudis, D., Iakovoglou, V. and Mitsopoulos, I. Mitigating land degradation in a Natura 2000 site by targeting reforestation areas with the use of Remote Sensing, GIS and Multi-Criteria Analysis. IUFRO Conference on Restoring Forests: Advances in Techniques and Theory, 27 - 29 September 2011. Madrid, Spain.

Dissertation

Gounaridis, D. (2018). Multi-scale modelling of land cover/land use (LCLU) change with Geoinformatics and scenario-based simulations. Ph.D. Dissertation, Department of Geography, University of the Aegean, 191p. Advisor: S. Koukoulas. Advisory Committee: H. Briassoulis, E. Symeonakis.

Theses

Gounaridis, D. (2012). Assessing fire severity and post-fire environmental recovery, employing methodologies of Geoinformatics. MSc Thesis, Department of Geography, University of the Aegean, 90p (in Greek).

Gounaridis, D. (2010). Riparian and wetland ecosystems in Greece, definition and characteristics. BSc thesis, Department of Forestry and Natural Environment Management, International Hellenic University, 45p (in Greek).

Teaching

2016: Lifelong Learning. University of the Aegean

E-learning Postgraduate

Introduction to Geographic Information Systems (QGIS). 10 Teaching modules
(with D. Kavroudakis and G. Papapanos)

2014: Teaching Assistant, Department of Geography. University of the Aegean

Undergraduate

Applications of Geographic Information Systems (GIS) (with S. Koukoulas)

Postgraduate

Special issues in Geographic Information Systems (GIS) (with S. Koukoulas)

Applications of Remote Sensing (RS) (with C. Petropoulou)

Guest lectures

Gounaridis, D. (2021). The Impact of Urban Sprawl on Forests in Southeast Michigan, 1985-2015. Urban Sustainability (Course #: EAS 537), School for the Environment and Sustainability, University of Michigan, Ann Arbor, USA.

Gounaridis, D. (2020). The Impact of Urban Sprawl on Forests in Southeast Michigan, 1985-2015. Urban Sustainability (Course #: EAS 537), School for the Environment and Sustainability, University of Michigan, Ann Arbor, USA.

Gounaridis, D. (2019). Land cover change detection and spatial pattern analysis for south-east Michigan. Urban Scenarios Lab Seminars, Taubman College of Architecture and Urban Planning, University of Michigan, Ann Arbor, USA.

Gounaridis, D. (2018). Exploring prospective urban growth trends under different economic outlooks and land-use planning scenarios: The case of Athens. Undergraduate level class - Geographic Information Systems (GIS) applications, Department of Geography, University of the Aegean, Mytilene, Greece.

Gounaridis, D. (2018). Land Cover mapping of Greece: a semi-automated classification approach based on Landsat data and Random Forests. Undergraduate level class – Introduction to Remote Sensing, Department of Geography, University of the Aegean, Mytilene, Greece.

Gounaridis, D. (2016). Land Cover mapping of Greece: a semi-automated classification approach based on Landsat data and Random Forests. Undergraduate level class – Introduction to Remote Sensing, Department of Geography, University of the Aegean, Mytilene, Greece.

Referee service

Journal articles:

Computers, Environment and Urban Systems; Ecological Indicators; Ecological Informatics; Environment and Planning B; Environmental Science & Technology; Geocarto International; Habitat International; ISPRS International Journal of Geo-Information; International Journal of Applied Earth Observation and Geoinformation; Land; Landscape and Urban Planning; Nature Communications; PLOS Climate; PLOS

One; Remote Sensing; Science of the Total Environment; Scientific Data; Sensors; Sustainable Cities and Society; Transactions in GIS; Urban Geography

Grant proposals:

US National Science Foundation (NSF). Proposal submitted to the Geography and Spatial Sciences (GSS) Program.