Publication list

Lucian- Daniel Drăguţ **Ianuarie 2018**

ISI journals

1. Dornik, A., **Drăguţ, L.**, Urdea, P., in press. Soil type mapping using land-surface segmentation and the Random Forest classifier. *Pedosphere* (accepted 21 Jan 2016.
2. Bandura, P., Minar, J., **Drăguţ, L.**, Harcinikova, T., 2017. Evaluation of object-based image analysis for morphostructural subdivision of the Western Carpathians. *Zeitschrift für Geomorphologie Supplementbände*, 61(2), 121-135.
3. Hayakawa, Y. S., Yoshida, H., **Drăguţ, L**., Oguchi, T., 2017. Automated extraction of hummocks in debris avalanche deposits using DEMs: A case study at Mt. Gassan, northwest Japan. *Zeitschrift für Geomorphologie Supplementbände*, 61(2), 199-212.
4. Pârvulescu L., Zaharia C., Groza, M.I, Csillik, O., Satmari A., **Drăguț L**., 2016. Flash-flood potential: a proxy for crayfish habitat stability. *Ecohydrology,* 9 (8), 1507-1516.
5. Walz, U., Hoechstetter, S., **Drăguţ, L**., Blaschke, T., 2016. Integrating time and the third spatial dimension in landscape structure analysis. *Landscape Research*, 41 (3), 279-293.
6. Belgiu, M., **Drăguţ, L.**, 2016. Random forest in remote sensing: A review of applications and future directions. *ISPRS Journal of Photogrammetry and Remote Sensing,* 114, 24-31. **Hot Paper**.
7. Dornik, A., **Drăguţ, L.**, Urdea, P., 2016. Knowledge-based soil type classification using terrain segmentation. *Soil Research,* 54 (7), 809-823.
8. **Drăguţ, L.**, Dornik, A., 2016. Land-surface segmentation as a method to create strata for spatial sampling and its potential for digital soil mapping. *International Journal of Geographical Information Science*, 30 (7), 1359-1376.
9. Csillik, O., Evans, I.S., **Drăguţ, L**., 2015. Transformation (normalization) of slope gradient and surface curvatures, automated for statistical analyses from DEMs. *Geomorphology,* 232: 65-77.
10. Belgiu, M. & **Drăguţ, L.**, 2014. Comparing supervised and unsupervised multiresolution segmentation approaches for extracting buildings from very high resolution imagery. *ISPRS Journal of Photogrammetry and Remote Sensing,* 96, 67-75.
11. **Drăguţ, L**., Csillik, O., Eisank, C., Tiede, D., 2014. Automated parameterisation for multi-scale image segmentation on multiple layers. *ISPRS Journal of Photogrammetry and Remote Sensing*, 88: 119-127. **Highly Cited Paper**.
12. Belgiu, M., **Drăguţ, L.,** Strobl, J., 2014. Quantitative evaluation of variations in rule-based classifications of land cover classes in urban neighbourhoods using WorldView-2 imagery. *ISPRS Journal of Photogrammetry and Remote Sensing*, 87: 205-215.

13. Pârvulescu L., Zaharia C., Satmari A., **Drăguț L.**, 2013. Is the distribution pattern of the stone crayfish in the Carpathians related to karstic refugia from Pleistocene glaciations? *Freshwater Science* 32: 1410–1419.
14. Ardelean, F., **Dragut, L.**, Urdea, P., Torok-Oance, M., 2013. Variations in landform definition: a quantitative assessment of differences between five maps of glacial cirques in the Tarcu Mountains (Southern Carpathians, Romania). *Area* 45: 348-357.
15. d'Oleire-Oltmanns, S., Eisank, C., **Drăguţ, L.** and Blaschke, T., 2013. Landform mapping from Aerial Photographs and Digital Elevation Models (DEMs): A comparative study. *IEEE Geoscience and Remote Sensing Letters* 10: 947-951.
16. **Drăguţ, L.** and Eisank, C., 2012. Automated classification of topography from SRTM data using object-based image analysis, *Geomorphology* 141-142: 21-33 doi: 10.1016/j.geomorph.2011.12.001.
17. Verhagen, P. and **Drăguţ, L.**, 2012. Object-based landform classification from DEMs for archaeological predictive mapping, *Journal of Archaeological Science* 39: 698-703 doi: 10.1016/j.jas.2011.11.001.
18. **Drăguţ, L.**, Eisank, C. and Strasser, T., 2011. Local variance for multi-scale analysis in geomorphometry, *Geomorphology* 130: 162-172 doi:10.1016/j.geomorph.2011. 03.011.
19. **Drăguţ, L.** and Eisank, C., 2011. Object representations at multiple scales from Digital Elevation Models, *Geomorphology* 129: 183-189, doi:10.1016/j.geomorph.2011.03. 003.
20. **Drăguţ, L.**, Tiede, D. and Levick, S., 2010. ESP: a tool to estimate scale parameters for multiresolution image segmentation of remotely sensed data, *International Journal of Geographical Information Science* 24: 859-871. **Highly Cited Paper**.
21. **Drăguţ, L.**, Schauppenlehner, T., Muhar, A., Strobl, J. and Blaschke, T., 2009. Optimization of scale and parametrization for terrain segmentation: an application to soil-landscape modeling, *Computers & Geosciences* 35: 1875-1883, doi:10.1016/j.cageo.2008.10.008.
22. Luscier, J.D, Thompson, W.L, Wilson, J.M, Gorham, B.E. and **Drăguţ, L.D.,** 2007. Techniques for determining percent ground cover – Reply, *Frontiers in Ecology and the Environment* 5: 240-240.
23. **Drăguţ, L.** and Blaschke, T., 2006. Automated classification of landform elements using object-based image analysis, *Geomorphology* 81: 330-344, doi:10.1016/j.geomorph.2006.04.013.
24. Luscier, J.D, Thompson, W.L, Wilson, J.M, Gorham, B.E. and **Drăguţ, L.D.,** 2006. Using digital photographs and object- based image analysis to estimate percent ground cover in vegetation plots, *Frontiers in Ecology and the Environment* 4: 408-413, doi:10.1890/1540-9295(2006)4[408:UDPAOI]2.0.CO;2.

Books

1. Schreiber, W., **Drăguţ, L.** and Man, T. (editors.), 2003. *Landscape analysis in the Western side of the Transylvanian Plain*. Cluj University Press, 135 pp. (in Romanian, with TOC and abstract in English).
2. **Drăguţ, L**. (2002): The Şureanu Mountains. A Geomorphologic study. PhD Thesis, manuscript, 193 pp (in Romanian).

3. **Drăguţ, L.,** 2000. *Landscape Geography*. Cluj University Press, Cluj-Napoca, 119 pp (in Romanian).

ISI Proceedings & Scopus indexed

1. Eisank, C., **Drăguţ, L.**, Götz, J. and Blaschke, T., 2010. Developing a semantic model of glacial landforms for object-based terrain classification - the example of glacial cirques. In: *GEOBIA 2010-Geographic Object-Based Image Analysis*, edited by Addink, E.A. and Van Coillie, F.M.B. Book Series: International Archives of the Photogrammetry Remote Sensing and Spatial Information Sciences Volume: 38-4-C7.
2. **Drăguţ, L**., Walz, U. and Blaschke, T., 2010. The third and fourth dimensions of landscape: towards conceptual models of topographically complex landscapes. *Landscape Online* 22: 1-10, doi:10.3097/LO.201022.
3. Cristea, V., Gafta, D., Baciu, C., Goia, I., **Drăguţ, L**. and Coroiu, I., 2003. Multidisciplinary assessment of the landscape development around the Cluj-Napoca city (Romania). In *Multifunctional Landscapes: monitoring, diversity and management,* edited by Brandt, J. and Vejre, H. Advances in Ecological Sciences **15**. WIT Press, pp. 271-285.

Articles in edited volumes

1. Eisank, C. and **Drăguţ, L.**, 2010. Detecting characteristic scales of slope gradient. In: *Geospatial Crossroads @ GI_Forum '10. Proceedings of the Geoinformatics Forum Salzburg*, edited by Car, A., Griesebner, G. and Strobl, J., Wichmann, pp. 48-57.
2. **Drăguţ, L.** and Blaschke, T., 2008. Terrain segmentation and classification using SRTM data. In *Advances in Digital Terrain Analysis*, edited by Zhou, Q., Lees, B. and Tang, G.A. Series Lecture Notes in Geoinformation and Cartography, Springer, pp. 141- 158.
3. Muntean, O.L., **Drăguţ, L**., Baciu, N., Man, T., Buzilă, L. and Ferencik, I., 2007. Environmental impact assessment as a tool for environmental restoration (a case study: Copşa-Mică area, Romania). In *Use of Landscape Sciences for the Assessment of Environmental Security*, edited by Petrosillo, I., Müller, F., Jones, K.B., Zurlini, G., Krauze, K., Victorov, S., Li, B.-L., Kepner, W.G. Springer, pp. 461-474.
4. **Drăguţ, L**. (2003), *Cap. 3.1.- Cadrul teoretic,* În: "*Analiza peisajelor geografice din partea de vest a Câmpiei Transilvaniei",* Eds. Schreiber, W., Drăguţ, L., Man, T. (Cluj-Napoca, Presa Universitară Clujeană), pp. 10-12.
5. **Drăguţ, L**., Man, T. (2003), *Metode de analiză şi evaluare a peisajului ca entitate globală*, În: "*Analiza peisajelor geografice din partea de vest a Câmpiei Transilvaniei",* Eds. Schreiber, W., Drăguţ, L., Man, T. (Cluj-Napoca, Presa Universitară Clujeană), pp. 12-29.
6. **Drăguţ, L.,** Man, T., Schreiber, W. (2003), *Unităţile elementare ale peisajului*, În: "*Analiza peisajelor geografice din partea de vest a Câmpiei Transilvaniei",* Eds. Schreiber, W., Drăguţ, L., Man, T. (Cluj-Napoca, Presa Universitară Clujeană), pp. 79-93.
7. Schreiber, W., **Drăguţ, L.** (2003), *Tipuri de peisaje geografice*, În: "*Analiza peisajelor geografice din partea de vest a Câmpiei Transilvaniei",* Eds. Schreiber, W., Drăguţ, L., Man, T. (Cluj-Napoca, Presa Universitară Clujeană), pp. 106-109.

8. Buzilă, L., **Drăguţ, L**., Drăgulean, V., Baciu, C. (2002): Geomorphology and geomorphologic risk assessment. In: „Municipiul Cluj-Napoca şi zona periurbană", Eds. Cristea, V., Baciu, C. and Gafta, D. (Cluj-Napoca: Edit. Accent), 15-25, (in Romanian).

Articles in national and international refereed journals

1. Peter Bandura, Jozef Minár, Tatiana Harciníková, **Lucian Drăguţ**, 2015. Towards delineation of the morphostructural division of the Western Carpathians using object-based image analysis. *Geomorphometry for natural hazards geomodelling*, Poznań, Poland; 06/2015.
1. Hayakawa, Y.S., Yoshida, H., **Drăguţ, L.**, Oguchi, T., 2015. Comparative analysis of manual and automatic extractions of hummock landforms in Mt. Gassan, northwestern Japan. *Geomorphometry for natural hazards geomodelling*, Poznań, Poland; 06/2015.
2. Csillik, O., Evans, I.S., **Drăguţ, L.**, 2015. Automated transformation of slope and surface curvatures to avoid long tails in frequency distributions. *Geomorphometry for natural hazards geomodelling*, Poznań, Poland; 06/2015, 119-122.
3. **Drăguţ, L**., Dornik, A., 2013. Evaluation of land-surface segmentation as support for soil sampling. *Proceedings of Geomorphometry2013*, Nanjing, China, O-16-1-O16-4.
4. **Drăguţ, L**., Csillik, O., Minár, J., Evans, I.S., 2013. Land surface segmentation to delineate elementary forms from Digital Elevation Models, *Proceedings of Geomorphometry2013*. Nanjing, China, O-6-1-O-6-4.
5. Verhagen, J., Drăguţ, L., 2013. Discovering the Dutch Mountains. An experiment with automated landform classification for purposes of archaeological predictive mapping, in: Contreras, F., Farjas, M., Melero, F.J. (Eds.), *Proceedings of the 38th Annual Conference on Computer Applications and Quantitative Methods in Archaeology*, CAA2010, Granada, Spain, pp. 213-216.
6. d'Oleire-Oltmanns, S., **Eisank**, C., **Drăguţ**, L., Schrott, L., Marzolff, I. and **Blaschke**, T., 2012. Object-based landform mapping at multiple scales from digital elevation models (DEMs) and aerial photographs. *Proceedings of the 4th GEOBIA*, 7-9 May 2012, Rio de Janeiro, Brazil, 496-500.
7. Eisank, C., **Drăguţ, L.** and Blaschke, T., 2011. A generic procedure for semantics-oriented landform classification in object-based image analysis, *Proceedings of Geomorphometry2011*, Redlands, California, USA, 125-128.
8. **Drăguţ, L.** and Eisank, C., 2011. Automated classification of topography from SRTM data using object-based image analysis, *Proceedings of Geomorphometry2011*, Redlands, California, USA, 113-116.
9. Eisank, C. and **Drăguţ, L.,** 2010. Multi-scale pattern analysis of geographic entities. In: Painho, M., Santos, M.Y. and Pundt, H. (Eds.) *Proceedings of AGILE 2010*. Geospatial Thinking. Guimaraes, Portugal.
10. **Drăguţ, L**., Eisank, C., Strasser, T. and Blaschke, T., 2009. A comparison of methods to incorporate scale in geomorphometry. *Proceedings of Geomorphometry2009,* 133-139.
11. **Drăguţ, L**., Schreiber, E.W., Muntean, O.L., and Man, T., 2005. The Evaluation of Landscape in the Transylvanian Plain (Romania). *EcoSys* 11: 162 - 168.

12. Muntean, O.L., **Drăguţ, L**. and Baciu, N., 2005. Minimum Data Sets for Landscape Indicators using GIS (A Case Study: Târnava Mare Corridor, Romania). *EcoSys* 11: 24 - 31.
13. Baciu, C., Costin, D., **Drăguţ, L**., Buzilă, L. and Mureşan, A., 2004. The role of geosciences in designing modern railways. *Environment & Progress* 2: 321-324 (in Romanian).
14. Baciu, C., Costin, D., Buzilă, L., Constantina, C., **Drăguţ, L**., Mureşan, A. and Ianoliu, C., 2003. The assessment of natural elements for the optimal design of the railway between Apahida and Câmpia Turzii. *Environment & Progress* 1: 15-18 (in Romanian).
15. Muntean, L., Baciu, N. and **Drăguţ, L**., 2003. Environmental Decline Assessment in Copşa Mică Area (Romania). *EcoSys* 10: 98-106.
16. Muntean, O. L. and **Drăguţ, L**., 2003. The Quality of Life Within the Context of Environmental Decline (A Study Case: Copşa Mică Area, Romania). *Studia Universitatis Babes-Bolyai, Geographia* XLVIII/1: 9-13.
17. Schreiber, W., **Drăguţ, L**. and Man, T., 2003. Landschaftsentwicklung in der westlichen Siebenbürger Heide (Rumänien). *Würzburger Geographische Manuskripte* 63: 145-152.
18. Urdea, P., **Drăguţ, L.** (2002-2003), *Noi date asupra reliefului glaciar şi periglaciar din Munţii Şureanului,* Studii şi Cercetări de Geografie, XLIX-L, Bucureşti, 191-206.
19. **Drăguţ, L.,** Man, T., Schreiber, W. E. (2002), *Analiza comparativă a unităţilor elementare de peisaj din partea de vest a Câmpiei Transilvaniei,* Studia Universitatis Babeş-Bolyai, Geographia XLVIII/1, p. 25-30.
20. **Drăguţ, L.**, Man, T., Schreiber, W. E. (2001), *A landscape study using the analysis of elementary landscape units: Ţaga community case study,* Publicationes Instituti Geographici Universitatis Tartuensis, 92, "Development of European Landscapes", vol. II, Tartu, p. 662-665.
21. Mac, I, **Drăguţ, L.** (2000), *Formaţiuni muntoase, puncte de vedere*, Revista de Geomorfologie, 2, Bucureşti, p. 151-155.
22. **Drăguţ, L.** (2000), *Evaluarea peisajelor geografice din teritoriul administrativ al municipiului Cluj-Napoca*, Studia Universitatis Babeş-Bolyai, Geographia, XLV, 1, p.11-15.
23. Mac, I., **Drăguţ, L**. (1997), *Rolul reliefului în dezvoltarea, amenajarea teritorială şi estetica urbană a oraşului Deva*, Analele Universităţii de Vest din Timişoara, seria Geografie, vol. VII, p. 11-24.
24. **Drăguţ, L.,** Komlosi, Iuliana, Ianoş, Gh., Cardoş, T., Lăzureanu, A. (1994*), Cercetări privind poluarea atmosferei oraşului Timişoara cu pulberi sedimentabile*, Analele Univ. Timişoara, vol. IV, p. 119-124.

Published contributions to academic conferences

1. Peter Bandura, **Lucian Drăguţ**, Tatiana Harciníková, 2015. Delineation of basic morphometric-morphostructural individuals of the Western Carpathians using object-based image analysis. *Role of fieldwork in geomorphology*, Pilsen; 03/2015.
2. Eisank, C., **Drăguţ, L.** and Blaschke, T., 2011. Towards semantic interoperability in digital geomorphological mapping. *Geophysical Research Abstracts*, Vol. 13, EGU2011-14052.
3. **Drăguţ, L.** and Eisank, C., 2010. Hierarchical mapping of landforms from Digital Elevation Models (DEMs). Geologica Balcanica, 39 (1-2), XIX

Congres of the Carpathian-Balkan Geological Association, Abstracts Volume, pp. 101-102.
4. **Drăguţ, L.**, Tiede, D. and Levick, S., 2010. ESP: a tool to estimate scale parameters for multiresolution image segmentation of remotely sensed data. GEOBIA 2010, 29 June-02 July 2010, Ghent, Belgium, pp. 38.
5. **Drăguţ, L**., Eisank, C. and Strasser, T., 2009. Cells vs. objects and scale issues in terrain-based environmental modeling. *Proceedings ICC2009*, 15-21 November 2009, Santiago, Chile.
6. **Drăguţ, L.**, Walz, U. and Blaschke, T., 2009. The third and fourth dimension of landscapes. In: Breuste, J., Kozava, M., Finka, M. (eds.). European Landscapes in Transformation. Challenges for Landscape Ecology and Management. Salzburg, Bratislava, 356-357.
7. Eisank, C., **Drăguţ, L.**, 2009. Multi-scale analysis of slope gradient using local variance graphs. *GI Forum 2009*, 7-10 July, Salzburg, Austria.
8. **Drăguţ, L**., Blaschke, T., Eisank, C. and Strasser, T., 2009. Scale issues in landscape representation from Digital Elevation Models. The 1st International symposium of geography "*Landscapes: perception, understanding, awareness and action*", 3-5 April 2009, Bucharest, Romania.
9. **Drăguţ, L.**, Eisank, C. and Strasser, T., 2009. Incorporating scale into digital terrain analysis. *Geophysical Research Abstracts*, Vol. 11, EGU2009-5583.
10. **Drăguţ, L.**, Blaschke, T., Eisank, C. and Strasser, T., 2008. Scales and hierarchies in landform classification. The SCALA project. Proceedings Mitteleuropäische Geomorphologietagung 2008, Salzburg.
11. Schauppenlehner, T., **Drăguţ, L.**, Blaschke, T. and Muhar, A., 2008. Using landform classification to improve the interpolation of soil taxation point data. European Geosciences Union General Assembly 2008, *Geophysical Research Abstracts* 10.
12. **Drăguţ, L.** and Blaschke, T., 2008. 3D landscape units for analysis of landscape structure. Methodology of Landscape Research, Sosnowiec-Krynica, Poland, pp. 25.
13. Blaschke, T., Lang, S., Schöpfer, E., Tiede, D. and **Drăguţ, L.,** 2007. Landscape change assessment: integration of remote sensing, GIS and spatial modeling concepts. IALE World Congress 2007, *Book of Abstracts*, part II, 819 - 820.
14. Flügel, W.A., Bongartz, K., Janauer, G., **Drăguţ, L**., Zeil, P. and Kienberger, S., 2007. Comparative analysis of climate change impacts in the Yarlung Tsangpo (Upper Brahmaputra) and Upper Danube river basins – the BRAHMATWINN Project. European Geosciences Union General Assembly 2007, *Geophysical Research Abstracts* 9.
15. Muntean, O.L., **Drăguţ, L.**, Baciu, N. and Dimén, L., 2006. GIS for Environmental and Landscape Assessment (A Case-Study: Târnava Mare River Corridor, Transylvanian Tableland). RevCAD 6, *Aeternitas*, Alba-Iulia, Romania.
16. **Drăguţ, L.** and Blaschke, T., 2006. Landform classification using SRTM data and object-based image analysis. *Proceedings TADTM*, Nanjing, China, CD ROM.
17. **Drăguţ, L.** and Blaschke, T., 2006. Geomorphometry and object-based image analysis for delineating complex landscape units. *Proceedings Environment&Progress*, Cluj-Napoca, Romania, CD ROM.

18. Muntean, O.L., **Drăguţ, L**., Baciu, N. and Mihăiescu, R., 2006. Environmental planning using GIS (a case study: Târnava Mare river corridor, Romania). *Proceedings Environment&Progress*, Cluj-Napoca, Romania, CD ROM.
19. **Drăguţ, L.** and Blaschke, T., 2006. CLUE - Complex Landscape Units for Environmental assessment and modelling. 9th International Symposium on High Mountain Remote Sensing Cartography (HMRSC-IX), *Book of Abstracts*, 74 - 75.
20. V. Cristea, **L. Drăguţ**, C. Baciu and Gafta, D., 2003. A multidisciplinary approach to the sustainable development of the peri-urban area of the city of Cluj-Napoca, *Proceedings ENUPA workshop*, October 23-24, 2003, Gargnano, Italy.
21. Blaschke, T. and **Drăguţ, L.,** 2003. Integration of GIS and object-based image analysis to model and visualize landscapes, ISPRS workshop "Challenges in Geospatial Analysis, Integration and Visualization II", September 8- 9, 2003, Stuttgart, Germany, 18-23.
22. Urdea, P., **Drăguţ, L.** (2000), *New data concerning the glacial and periglacial landforms in the Şureanu Mountains*, in Abstracts Book "The XVIIIth Symposium of Geomorphology", Sighetu Marmaţiei, 28-30 September 2000.
23. Surd, V., Vrabete, Mihaela, Zotic, V., Mureşan, Alina, **Drăguţ, L.** (1997), *Spaţiul şi acţiunile violente asupra sa. Cazul teritoriului administrativ al municipiului Cluj-Napoca*, in Abstract Book "Geography within the Context of Contemporary Development, Cluj-Napoca, 6-7 June 1997.
24. **Drăguţ, L.** (1996), *Consideraţii asupra reliefului climatic din Munţii Şureanului*, în vol. "Cercetări în spaţiul carpato-danubian", Timişoara, p. 99-106.
25. **Drăguţ, L.** (1994), *Aspecte ale reliefului carstic din Munţii Şureanului*, Noosfera, "Geografia în anul 300 al Universităţii Bucureşti", p. 55-56.

INVITED LECTURES

1. **Drăguţ, L.,** *Object-oriented geomorphometry*. Keynote lecture, International Conference Geomorphometry 2015, Poznan, Polonia, June 22-26, 2015.
2. **Drăguţ, L.,** *Land-surface segmentation: progress and further challenges towards objective geomorphological mapping.* Keynote lecture, IAG/AIG International Workshop on "Objective Geomorphological Representation Models: Breaking through a New Geomorphological Mapping Frontier", Salerno, Italy, October 15-19, 2012.
3. **Drăguţ, L.,** *Scale and pattern in quantification of landscape structure*. Keynote lecture, International Conference „Environment – Landscape – European Identity", Bucharest, Romania, November 4-6, 2011.
4. **Drăguţ, L.,** *Digital Elevation Models in Landscape Ecology*. Invited lecture and hands-on sessions, GISLERS Summer School 2011 on "Bridging GIS, Landscape Ecology and Remote Sensing for Landscape Planning", Salzburg, Austria, July 2011.
5. **Drăguţ, L.,** *Digital Elevation Models in Landscape Ecology*. Invited lecture and hands-on sessions, GISLERS Summer School 2010 on "Bridging GIS, Landscape Ecology and Remote Sensing for Landscape Planning", Salzburg, Austria, July 2010.

6. **Drăguţ, L.,** *Is there any secret in writing a successful Marie Curie proposal?* Invited lecture, Training 4: PEOPLE: Marie-Curie-Förderungen im RP7, Salzburg, Austria, October 15, 2009.
7. **Drăguţ, L.,** *Digital Elevation Models in Landscape Ecology*. Invited lecture and hands-on sessions, GISLERS Summer School 2009 on "Bridging GIS, Landscape Ecology and Remote Sensing for Landscape Planning", Salzburg, Austria, July 2009.
8. **Drăguţ, L.** and Blaschke, T., *3D landscape units for analysis of landscape structure*. Keynote lecture, IALE Polish Chapter Conference "Methodology of Landscape Research", Krynica, Poland, March 2008.
9. **Drăguţ, L.,** *Landscape assessment using GIS.* Invited lecture, the 1st Firtos Summer School, Inlăceni, Romania, August 2007.
10. **Drăguţ, L.,** *Classification of Landform Elements Using Object-based Image Analysis*. Public lecture, University of Arkansas, USA, March 2006.
11. **Drăguţ, L.,** *Spatial Patterns in Landscape Ecology: From 2D to 3D Approach*. Occasional Lecturer Program (OLP), University of California, Davis, USA, January 2006.
12. **Drăguţ, L.,** *Landscape units for deriving landscape indicators*. Invited lecture, JRC-AgriEnv, Ispra, Italy, May 2005.
13. **Drăguţ, L.,** *Automated Classification of Landform Elements using Object-based Image Analysis*. Invited lecture, UNIGIS Summer School in Digital Terrain Modeling, Salzburg, Austria, September 2004.

Presentations (partial listing; presenter in **bold)**

1. **Drăguţ, L.** and Eisank, C., 2010. Hierarchical mapping of landforms from Digital Elevation Models (DEMs). XIX Congres of the Carpathian-Balkan Geological Association, Thessaloniki, Greece, 23-26 September 2010.
2. **Drăguţ, L.**, Tiede, D. and Levick, S., 2010. ESP: a tool to estimate scale parameters for multiresolution image segmentation of remotely sensed data. GEOBIA 2010, Ghent, Belgium, 29 June-02 July 2010.
3. **Drăguţ, L**. and Eisank, C., 2010. Multi-scale object representation for mapping landforms from Digital Elevation Models (DEMs). 14th Joint Geomorphological Meeting (JGM), Bucharest-Sinaia, Romania, May 2010.
4. **Drăguţ, L**., Eisank, C. and Strasser, T., 2009. Cells vs. objects and scale issues in terrain-based environmental modeling. Poster. International Cartography Conference 2009, Santiago, Chile, November 2009.
5. **Drăguţ, L**., Eisank, C., Strasser, T. and Blaschke, T., 2009. A comparison of methods to incorporate scale in geomorphometry. Geomorphometry2009, Zurich, Switzerland, September 2009.
6. **Eisank, C**. and **Drăguţ, L**., 2009. Multi-scale analysis of slope gradient using local variance graphs. Poster. GI Forum Salzburg, Austria, July, 2009.
7. **Drăguţ, L**., Strasser, T. and Eisank, C., 2009. Incorporating scale into digital terrain analysis. Poster. European Geosciences Union General Assembly 2009, Vienna, Austria, April 2009.
8. **Drăguţ, L.**, Blaschke, T., Eisank, C. and Strasser, T., 2009. Scale issues in landscape representation from Digital Elevation Models. The 1st International symposium of geography "Landscapes: perception, understanding, awareness and action", Bucharest, Romania, April 2009.

9. **Drăguţ, L.** and Blaschke, T., *Landform classification in the Hochkalter area, National Park Berchtesgaden, Germany*. GI Forum, Salzburg, Austria, July, 2007.
10. **Drăguţ, L.** and Blaschke, T., *Towards integrating terrain information into landscape classification*. Landscape classification: theory and practice, Warsaw, Poland, June 2007.
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