

CURRICULUM VITAE

Lucian- Daniel Drăguț

January 2010

CURRENT POSITIONS

Postdoctoral Research Associate
Department of Geography and Geology, University of Salzburg, Austria.

Lecturer
Department of Geography, West University of Timișoara, Romania.

EDUCATION

‘Babeș-Bolyai’ University Cluj-Napoca, Romania
Ph.D. Geomorphology, 2003

‘Babeș-Bolyai’ University Cluj-Napoca
M.Sc. Applied Geomorphology, 1996

West University of Timișoara, Romania
B.A. Geography, 1995

POSTDOC TRAINING COURSES

2007 “*Merging GIS and Spatial Statistics*”, Hands-on Geostatistics course and Workshop. Faculty of Agriculture in Naples, Italy, 29.01-03.02.2007.

2005 “*GIS-based Hydrologic Modeling with the Automated Geospatial Watershed Assessment (AGWA) Tool*”, Training program organized by the US Environmental Protection Agency. Veliko Turnovo, Bulgaria, September 08, 2005.

2004 “*Digital Terrain Modeling*”, UNIGIS International Summer School. Salzburg University, Austria, 22-29.09.2004.

PROFESSIONAL EXPERIENCE

Postdoctoral Research Associate, Z_GIS - Centre for Geoinformatics & Department of Geography and Geology, University of Salzburg, May 2006- present.

Fulbright Senior Fellow, CAST - Center for Advanced Spatial Technologies, University of Arkansas, October 2005- March 2006.

Lecturer, Department of Geography, West University of Timișoara, October 2004-present.

Guest researcher, Z_GIS - Centre for Geoinformatics, University of Salzburg, October 2002- May 2003.

Lecturer, Department of Geography, ‘Babeș-Bolyai’ University Cluj-Napoca, February 2002- September 2004.

Training in Landscape Ecology, Department of Geography, University of Ottawa, October- December 1999.

Teaching Assistant, Department of Geography, 'Babeş-Bolyai' University Cluj-Napoca, October 1996- January 2002.

COURSES TAUGHT

Data acquisition and integration.
GIS applied in environmental management.
Remote Sensing.
Regional Geography of Romania.
Landscape Ecology.
Introduction to Regional Planning.

OTHER PROFESSIONAL POSITIONS

2009

Member in the Scientific Committee of the Society of Geomorphometry

Member in the Scientific Committee of Geomorphometry 2009 International Conference, 31 August- 2 September 2009, Zurich, Switzerland.

Coordinator of the Symposium 'The third and fourth dimensions of landscapes' within the European IALE Conference, July 14, Salzburg, Austria.

2008

Editor Central European Journal of Geosciences.

Expert evaluator of grants administered by the National University Research Council (NURC), Romania.

Member of the Science for the Carpathians (S4C) network.

Member of the European Geosciences Union (EGU).

2007

Member of the Mountain Research Initiative (MRI) network.

2005

National Representative of Romania in the IGU Commission on the Sustainability of Rural Systems.

Contact Person within the CEEPUS (Central European Exchange for University Studies) network 'Applied Geoinformatics (CEE- GIS)'.

2004

Member of the National Society for Geography.

2002

National Representative of Romania in the Permanent European Conference for the Study of the Rural Landscape (PECSRL).

2001

Member of the International Association for Landscape Ecology (IALE).
Coordinator of the ERASMUS European mobility program, Department of Geography, 'Babeş-Bolyai' University Cluj-Napoca.

2000

Member of the Romanian Society for Geomorphology.

RESEARCH EXPERIENCE**2009**

SCALA-PLUS/ FP7-239312- *Scales and Hierarchies in Geomorphometry*. (PI) European Commission. EUR 37,500. (2009-2011).

2008

SCALA/ FWF-P20777-N15- *Scales and hierarchies in landform classification*. (Co-PI) Der Wissenschaftsfonds- FWF, Austria. EUR 282,087.54. (2008-2011).

2006

BRAHMATWINN/ FP6-036952- *Twinning European and South Asian River basins to enhance capacity and implement adaptive integrated water resources management approaches*. European Commission. Personal task: contribution to WP_3- Assessment of the natural environment. (2006- 2009)

CLUE/ FP6- 009532- *Complex Landscape Units for Environmental assessment and modeling*. (PI) European Commission. EUR 157,387. (2006- 2008).

2005

A new method of representing landscape; segmentation of three-dimensional landscape units for environmental applications. Romanian- U.S. Fulbright Commission. Award \$16,250. (October 2005- March 2006).

2004

Landscape dynamics assessment on the basis of synthetic indicators, within the context of sustainable development. Case study: Târnava Mare Corridor. NURC (2004- 2007).

2003

PATR- Blueprint for regional planning and development of the North-Western Region of Romania. Regional authorities (2003- 2004). Personal task: Infrastructure analysis.

Complex study concerning the optimal design of the railway between Apahida and Câmpia Turzii. NURC (2003- 2006).

2002

Automated classification of landform elements using GIS and object-oriented image analysis. Österreichischer Austauschdienst- OEAD. Award EUR 8,000. (October 2002- May 2003).

Pilot Study on the use of Landscape Sciences for Environmental Assessment. A Science Framework for International Cooperation. (National Expert) NATO/CCMS Project. (2002- 2006).

1999

Landscape Dynamics in the Transylvanian Plain. NURC (1999-2003). Personal tasks: spatial assessment of rural landscapes, editor of the book in which the results are presented.

1997

Environmental studies on the City of Cluj-Napoca and its surrounding area in the perspective of sustainable development. World Bank (1997- 2001). Personal tasks: Geomorphologic mapping and assessment of the geomorphologic hazards, Landscape assessment.

PATIJ- Blueprint for regional planning and development of the inter- counties belt within the North-Western Region of Romania. Regional authorities (1997- 2000). Personal tasks: Infrastructure analysis, project preparation.

SCHOLARSHIPS AND AWARDS

1. Marie Curie Reintegration Grant, European Commission (2009).
2. NURC Prize for Research Outcomes, Romania (2008).
3. Marie Curie Fellowship, European Commission (2006).
4. Occasional Lecturer Program Award, USA (2006).
5. Fulbright Senior Fellowship, USA (2005).
6. Ernst Mach Scholarship, Austria (2002).
7. Governmental Scholarship, Romania (1999).

INVITED LECTURES

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

PUBLICATIONS

ISI journals

1. **Drăguț, L.**, Tiede, D. and Levick, S., in press. ESP: a tool to estimate scale parameters for multiresolution image segmentation of remotely sensed data, *International Journal of Geographical Information Science* (accepted July 8, 2009).
2. **Drăguț, 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.
3. Luscier, J.D, Thompson, W.L, Wilson, J.M, Gorham, B.E. and **Drăguț, L.D.**, 2007. Techniques for determining percent ground cover – Reply, *Frontiers in Ecology and the Environment* 5: 240-240.
4. **Drăguț, L.** and Blaschke, T., 2006. Automated classification of landform elements using object-based image analysis, *Geomorphology* 81: 330-344.
5. Luscier, J.D, Thompson, W.L, Wilson, J.M, Gorham, B.E. and **Drăguț, 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.

Books

1. Schreiber, W., **Drăguț, 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. **Drăguț, L.**, 2000. *Landscape Geography*. Cluj University Press, Cluj-Napoca, 119 pp (in Romanian).

Articles in edited volumes (2005 – 2010)

1. **Drăguț, 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.
2. Muntean, O.L., **Drăguț, L.**, Baci, N., Man, T., Buzilă, L. and Ferencik, I., 2007. Environmental impact assessment as a tool for environmental restoration (a case study: Copșa-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.

Articles in national and international refereed journals (2005 – 2010)

1. **Drăguț, L.**, Walz, U. and Blaschke, T., in press. Summary of Symposium 6: The third and fourth dimensions of landscapes. *Landscape Online* (submitted December 4, 2009).
2. **Drăguț, L.**, Eisank, C., Strasser, T. and Blaschke, T., 2009. A comparison of methods to incorporate scale in geomorphometry. *Proceedings of Geomorphometry2009*, 133-139.
3. **Drăguț, L.**, Schreiber, E.W., Muntean, O.L. and Man, T., 2005. The Evaluation of Landscape in the Transylvanian Plain (Romania). *EcoSys* 11: 162 - 168.

4. Muntean, O.L., **Drăguț, L.** and Baci, N., 2005. Minimum Data Sets for Landscape Indicators using GIS (A Case Study: Târnava Mare Corridor, Romania). *EcoSys* 11: 24 - 31.

Published contributions to academic conferences (2005 – 2010)

1. **Drăguț, 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.
2. **Drăguț, L.**, Eisank, C. and Strasser, T., 2009. Incorporating scale into digital terrain analysis. European Geosciences Union General Assembly 2009, *Geophysical Research Abstracts* 11.
3. **Drăguț, L.**, Blaschke, T., Eisank, C. and Strasser, T., 2008. Scales and hierarchies in landform classification. The SCALA project. Proceedings Mitteleuropäische Geomorphologietagung 2008, Salzburg.
4. Schauppenlehner, T., **Drăguț, 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.
5. **Drăguț, L.** and Blaschke, T., 2008. 3D landscape units for analysis of landscape structure. Methodology of Landscape Research, Sosnowiec-Krynica, Poland, pp. 25.
6. Blaschke, T., Lang, S., Schöpfer, E., Tiede, D. and **Drăguț, 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.
7. Flügel, W.A., Bongartz, K., Janauer, G., **Drăguț, 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.
8. Muntean, O.L., **Drăguț, L.**, Baci, 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.
9. **Drăguț, L.** and Blaschke, T., 2006. Landform classification using SRTM data and object-based image analysis. *Proceedings TADTM*, Nanjing, China, CD ROM.
10. **Drăguț, L.** and Blaschke, T., 2006. Geomorphometry and object-based image analysis for delineating complex landscape units. *Proceedings Environment&Progress*, Cluj-Napoca, Romania, CD ROM.
11. Muntean, O.L., **Drăguț, L.**, Baci, 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.
12. **Drăguț, 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.

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

Drăguț, 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.

Drăguț, L., Eisank, C., Strasser, T. and Blaschke, T., 2009. A comparison of methods to incorporate scale in geomorphometry. Geomorphometry2009, Zurich, Switzerland, September 2009.

Eisank, C. and **Drăguț, L.**, 2009. Multi-scale analysis of slope gradient using local variance graphs. Poster. GI Forum Salzburg, Austria, July, 2009.

Drăguț, L., Strasser, T. and Eisank, C., 2009. Incorporating scale into digital terrain analysis. Poster. European Geosciences Union General Assembly 2009, Vienna, Austria, April 2009.

Drăguț, 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.

Drăguț, L. and Blaschke, T., *Landform classification in the Hochkalter area, National Park Berchtesgaden, Germany*. GI Forum, Salzburg, Austria, July, 2007.

Drăguț, L. and Blaschke, T., *Towards integrating terrain information into landscape classification*. Landscape classification: theory and practice, Warsaw, Poland, June 2007.

Drăguț, L. and Blaschke, T., *Landform classification in the Hochkalter area, National Park Berchtesgaden, Germany*. Poster. International Symposium “Landform – structure, evolution, process control“, Bonn, Germany, June 2007.

Flügel, W. A., Bongartz, K., Janauer, G., **Drăguț, L.**, Zeil, P., Kienberger, S., *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, Vienna, Austria, April 2007.

Drăguț, L. and Kienberger, S., *Daily Interpolation of Temperature and Precipitation Data for 20 years in Europe and Asia*. Geostatistics course and workshop “Merging GIS and Spatial Statistics”, Naples, Italy, February 2007.

Drăguț, L., Klug, H. and Schöpfer, E., *Brahmatwinn-Physical modelling*. Brahmatwinn WP4 Stakeholder Meeting, Salzburg, Austria, December 2006.

Drăguț, L. and Blaschke, T., *Landform classification using SRTM data and object-based image analysis*. TADTM Conference, Nanjing, China, November 2006.

Drăguț, L. and Blaschke, T., *Geomorphometry and object-based image analysis for delineating complex landscape units*. Environment&Progress, Cluj-Napoca, Romania, October 2006.

Drăguț, L. and Blaschke, T., *CLUE - Complex Landscape Units for Environmental assessment and modelling*. Poster. 9th International Symposium on High Mountain Remote Sensing Cartography (HMRSC-IX), Graz, Austria, September 2006.

Luscier, J.D, Thompson, W.L, Wilson, J.M, Gorham, B.E. and **Drăguț, L.D.**, *Using digital photographs and object - based image analysis to estimate percent ground cover in vegetation plots*. Poster. 1st International Conference on Object-based Image Analysis, Salzburg, Austria, July 2006.