

## PERSONAL INFORMATION

**Mihai-Daniel Nita**

✉ mihai.nita@unitbv.ro

WORKPLACE  
POSITION IN UNITBV

---

Transilvania University of Brasov  
PhD supervisor - Forestry field since 2019

## WORK EXPERIENCE

01/10/2012–Present

**Professor**

Transilvania University of Brasov, Brasov (Romania)

High Education Teaching and Research in Forest Hydrology, Watershed Management, Hydrotechnical Constructions, Remote Sensing and GIS

01/10/2016–01/03/2017

**Fulbright Visiting Professor**

University of Wisconsin-Madison, (USA)

Research in Remote Sensing in Forestry

01/10/2008–01/03/2017

**Business partner**

SC FOREST DESIGN SRL, Brasov (Romania)

Coordinating GIS projects, designing webGIS and Geoportals, coordinating research and development projects

01/06/2015–Present

**Associate Member**

Academy of Agricultural and Forestry Sciences "Gheorghe Ionescu-Sisesti" (A.S.A.S.)

Research and dissemination of top research in forestry (remote sensing and watershed management)

01/07/2014–01/04/2015

**Member of Technical-Economical Commission from Waters and Forests Department**

Ministry of Environment and Climate Change, Bucharest (Romania)

Member of Technical-Economical Commission from Waters and Forests Department, acting as an advisory body in matters of promotion, implementation, financing and monitoring of investment in forest and water domain.

01/10/2012–01/10/2014

**Fulbright Visiting Professor**

Transilvania University of Brasov, Brasov (Romania)

Leading practicum at Torrential Watershed management discipline

Leading practicum and project at Torrent Control Discipline

01/06/2015–Present

**Editorial Board Member**

Remote Sensing, Forests, Bucovina Forestier

Review articles submitted to journal, coordinating special issues

EDUCATION AND TRAINING

- 01/10/2008–01/10/2011 **PhD Diploma in Agricultural and Forestry Sciences, Silviculture Branch, Torrential watershed management Domain**  
Transilvania University of Brasov, Brasov (Romania)
  
- 19/09/2007–21/09/2007 **Environmental Governance in Eastern Europe**  
Jesus College, Oxford (United Kingdom)
  
- 01/10/2003–01/06/2008 **Forest Engineer**  
Faculty of Silviculture and Forest Engineering, Brasov (Romania)

PERSONAL SKILLS

Mother tongue(s) Romanian

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C1	C1	C1	C1
Spanish	A2	A2	A1	A1	A1
Russian	A1	A1	A1	A1	A2

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user  
Common European Framework of Reference for Languages

Communication skills

- Good communication skills gained through my experience as Head of GIS Department
- Excellent contact skills with students through my experience as Associate Professor

Organisational / managerial skills

- Leadership - currently responsible for a team of 8 people
- Good organisational skills gained as part of organizing committee for International Symposium "Forest and Sustainable Development" in 2008, 2010, 2012, 2014

Job-related skills

Skills in GIS, Remote Sensing, Spatial Analysis, Research in Geomatics, Environmental Science, Cartography, Data Analysis, Spatial Databases

Digital competence

- Very Good command of Geoprocessing tools and GIS software (ArcGIS, SagaGIS, QGIS)
- Very Good command of Remote Sensing software (ENVI, SCP, Orfeo Toolbox, GrassGIS)
- Very good command of office suite (word processor, spreadsheet, presentation software)

ADDITIONAL INFORMATION

Projects and awards

- 2022 – 2024: **Project Manager.** Co-designing Holistic Forest-based Policy Pathways for Climate Change Mitigation - ForestPahts. Horizon Europe
- 2022 – 2023: **Project manager.** „ Study of environmental effects due to torrent control structures located in small, predominantly forested watersheds". National Forest Administration Romsilva
- 2018 – 2020: **Project Manager:** Academic support services for Rectify and Mosaic 700 Corona Satellite images. University of Wisconsin – Madison
- 2015 – 2016: **GIS expert** in “COREHABS - Ecological corridors for species and habitats in Romania” **EEA Grants**
- 2014 – 2016: **Project manager** in **Ecological solutions for managing torrential valleys from ROSCI0207 Postăvaru, ROSCI0195 Piatra Mare și ROSCI0038 Ciucaș protected sites – Funds covered by UEFISCDI**
- 2014 - 2015: MSc Degree on Management of Sustainable and Ecological Tourism (MEST) Funds covered by Erasmus Plus
- 2014 - Consultant for conducting an analytical study on Forest Ecosystem Services (FES) in Moldova Funds covered by ENPI FLEG and 2013 - 2016: European Islands Continue education on Resources Efficiency Virtual Gateway (VIREG) Funds covered by ERASMUS Plus
- 2013 : Managing and conserving forests for multiple values Funds covered by UE
- 2012 - 2014: **GIS expert** in "Services for the development of scientific studies, inventories, maps (including GIS mapping) in ROSCI0395 sites" - Funds covered by **Sectorial Operational Programme – Environment**
- 2012 – 2014: **Research member in** Fundamentals and solutions for design and monitoring the torrent control works from predominantly forested watersheds – National Forest Administration
- 2012 – 2014: **Forestry expert in** Sustainable networks for the energetic use of lignocellulosic biomass in South East Europe (FOROPA) – Funds covered by The South East Europe Transnational Cooperation Programme
- 2012 - 2014: MSc Modules Programme in Environmental Security and Management-SEMP Funds covered by Erasmus Plus and Green Technology European Virtual Gateway-VITEG Funds covered by ERASMUS Plus
- 2012: **GIS expert** in "Developing a GIS database required for management plans for 10 Natura 2000 sites" - Funds covered by **Sectorial Operational Programme - Environment**
- 2012: **Project Manager** in "GIS database of the forest areas managed by the RPL Padurile Fagarasului R.A. Forest Management Unit" - Funds covered by **WWF (World Wide Fund)**
- 2010 - 2011: **GIS expert** in "Creating GIS spatial database for Vrancea, Covasna and Harghita" - Funds covered by **LIFE 08 NAT/RO/500**
- 2010 - 2013: **GIS expert** in "Services for the development of scientific studies, inventories, maps (including GIS mapping) in Defileul Jiului National Park" - Funds covered by **Sectorial Operational Programme – Environment**
- 2012 – GIS and Hydrology expert "Improving the Financial Sustainability of the Carpathian System of Protected Areas" – Watershed protection in AP (soil stabilization, erosion control, water level fluctuation) and Disaster Risk Reduction value in AP - UNDP
- 2009 – Project Manager in Hydrological mapping of the vegetation in order to establish the flood risk zones in predominantly forested watersheds – Fund covered by "8 band challenge"- Digital Globe
- 2008 - 2012: **GIS expert** in "Development of new products derived from satellite data adapted to users in the management of hydro-meteorological risk situations. (RISCASAT)" - Funds covered by **Executive Unit for Financing Higher Education, Research, Development and Innovation**
- 2008 – 2011: Research member “ New research on the behavior of the river network torrent control works in the upper basin of Tarlung (ID740)” - CNCSIS

## Publications

- Baban, G., & Daniel Niță, M. (2023). Measuring forest height from space. Opportunities and limitations observed in natural forests. *Measurement*, 211, 112593. <https://doi.org/10.1016/J.MEASUREMENT.2023.112593>
- Niță, M. D., & Borz, S. A. (2023). Accuracy of a Smartphone-based freeware solution and two shape reconstruction algorithms in log volume measurements. *Computers and Electronics in Agriculture*, 205, 107653. <https://doi.org/10.1016/J.COMPAG.2023.107653>
- Rizayeva, Afag, Mihai D. Nita, and Volker C. Radeloff. "Large-area, 1964 land cover classifications of Corona spy satellite imagery for the Caucasus Mountains." *Remote Sensing of Environment* 284 (2023): 113343.
- Tudose, Nicu Constantin; Ungurean, Cezar; Davidescu, Șerban; Clinciu, Ioan; Marin, Mirabela; Niță, Mihai Daniel; Adorjani, Andrei; Davidescu, Adriana (2020): Torrential flood risk assessment and environmentally friendly solutions for small catchments located in the Romania Natura 2000 sites Ciucas, Postavaru and Piatra Mare, *Science of The Total Environment*, Volume 698, 1. 5 year IF: 5.7
- Popa, Bogdan; Niță, Mihai Daniel; Hălălișan, Aureliu Florin (2019): Intentions to engage in forest law enforcement in Romania: An application of the theory of planned behavior, *Forest Policy and Economics*, 100, 33-43, 2019, Elsevier. 5 year IF: 3.2
- Manakos, Ioannis; Tomaszewska, Monika; Gkinis, Ioannis; Brovkina, Olga; Filchev, Lachezar; Genc, Levent; Gitas, Ioannis; Halabuk, Andrej; Inalpulat, Melis; Irimescu, Anisoara, Niță, Mihai Daniel et. al (2018): Comparison of Global and Continental Land Cover Products for Selected Study Areas in South Central and Eastern European Region, *Remote Sensing*, 10, 12, 1967, Multidisciplinary Digital Publishing Institute. IF: 4.2
- Niță M.D., Munteanu C, Gutman, G., Abrudan I V., Radeloff VC (2018) - Widespread forest cutting in the aftermath of World War II captured by broad-scale historical Corona spy satellite photography, *REMOTE SENSING OF ENVIRONMENT*, Volume 204, p. 322-332. 5 year IF: 7.7
- Stancioiu, P.T.; Niță M.D.; Lazar, Gabriel Ervin (2018) - Forestland connectivity in Romania- Implications for policy and management. *LAND USE POLICY*. Volume: 76 p. 487-499. 5 year IF: 3,66
- Dinca L, Niță M.D., Hofgaard A, Alados CL, Broll G, Borz SA, Wertz B, Monteiro AT (2017) - Forests dynamics in the montane-alpine boundary: a comparative study in protected European mountains using satellite imagery and climate data. *Climate Research*. DOI information: 10.3354/cr01452. 5 year IF: 2.93
- Popa, B., Borz, S. A., Niță M.D., Ioras, F., Iordache, E., Borlea, F., ... Abrudan, I. V. (2016). Forest Ecosystem Services Valuation in Different Management Scenarios: a Case Study of the Maramures Mountains. *Baltic Forestry*, 22(2), 327–340. 5 year IF: 0.563
- Niță M.D., Clinciu I., Popa B. (2016) - Evaluation of stream bed dynamics from Vidas torrential valley using terrestrial measurements and GIS techniques. *ENVIRONMENTAL ENGINEERING AND MANAGEMENT JOURNAL*. Vol.15, No. 6, 1387-1395. 5 year IF: 0.795
- Munteanu C, Niță M.D., Abrudan I V., Radeloff VC (2016) - Historical forest management in Romania is imposing strong legacies on contemporary forests and their management. *Forest Ecology and Management*, pp. 179-193. DOI information: 10.1016/j.foreco.2015.11.023. 5 year IF: 3.23
- Popa B., Coman C., Borz S., Niță M.D. et al. (2013) - Total Economic Value of Natural Capital – A Case Study of Piatra Craiului National Park. *Notulae Botanicae*, Vol. 41, No.2. 5 year IF: 0.72
- Iordache, E., Niță M.D., Clinciu, I. (2012). Planning forest accessibility with a low ecological impact | Planiranje otvaranja šuma na osnovi okolišne pogodnosti. *Croatian Journal of Forest Engineering*, 33(1), 143–148. 5 year IF: 0.909
- Niță M.D., Clinciu I., Tudose, N.C. (2011): "Estimating and mapping torrentiality risk in small forested watersheds". *Bulletin of the Transilvania University of Brasov*, vol. 4 (53)- 2011 - series II Forestry - Wood Industry - Agricultural Food Engineering
- More info at: <https://scholar.google.ro/citations?user=hBkhiNMAAAAJ&hl=ro>

Books and chapters

- 2019 - Corectarea Torentilor. Editura Universitatii Transilvania
- 2015 - "Forest management and the impact on water resources: a review of 12 nations". UNESCO. ISBN 978-92-3-100216-8
- 2014 - Behaviour and effects of the torrential hydrographical management structures in a mountain watershed, Publishing House: Editura Universitatii Transilvania
- 2013 - Watershed management located in the mountain protected areas , Publishing House: Lux Libris, ISBN 978-973-131-236-1
- 2011 - Research on the designing the river system dams in the upper basin of Tarlung (upstream Săcele Lake), Publishing House: Editura Universitatii Transilvania ISBN:978-973-598-989-7

Memberships

- **SouthCentral European Regional International Network (SCERIN)** - SCERIN is one of the regional networks of the GOF-C-GOLD panel. GOF-C-GOLD (Global Observation of Forest and Land Cover Dynamics) is a panel of GTOS. GTOS (Global Terrestrial Observing System) is a programme for observations, modelling, and analysis of terrestrial ecosystems to support sustainable development.
- **Romanian National Society of Soil Science (member since 2015)** - SNRSS encourage scientific research in all fields of soil science and promoting the practical application of its results
- **geo-spatial.org (member since 2008)** - geo-spatial.org explores the concepts, techniques and tools specific to geospatial community. Promotes usage of free and open source software solutions. The goal is to facilitate the access to geographic data and map in a way to become an universal tool of communication and registration of relations between social components (scientific, political, cultural, religious, economic) and their geospatial dimension.

Workshops, seminars and consultations

- Speaker: Fusing EO data for forest and land cover dynamics. From historical satellite images to 3D technologies. SKOLTECH Space Center Seminar, Moscow, Russia, 2019
- Trainer: Advanced classification methods with focus on Random Forest Classifier. Trans-Atlantic Training – Novi Sad 2019. Radar and Optical Remote Sensing in the Agricultural and Environmental Monitoring
- Trainer: Remote Sensing using Google Earth Engine. South Asia Regional Information Network (SARIN), 2018, Vientiane, Laos
- Trainer: Landsat time series in the forestry research Trans-Atlantic Training Integration of Radar and Optical Remote Sensing in Studying Land Cover/Land Use Change Zagreb, Croatia 7-11 June 2018
- Trainer: Remote Sensing using Google Earth Engine. South Asia Regional Information Network (SARIN), 2018, Bangkok, Thailand
- Erasmus Plus Visiting Scholar – “Using Computer Vision in monitoring torrent control dams”, 19-23 October 2015 – Madrid
- Trainer in "Applied geomatics in forestry" for Institute of Forest Research Chisinau, May 2015 -Moldova
- Organizer in “Sustainable networks for the energetic use of lignocellulosic biomass in South East Europe” 19 December 2014, Brasov
- Trainer in Seminar "Free and open source solutions for geospatial data processing and
- Trainer in seminar “GIS database application using the following software: Quantum GIS, PostgreSQL. PostGIS and PgAdmin as part of project for integrated management of Natura 2000 site Munții Făgăraș și Piemontul Făgăraș”, September 2014
- Trainer in Seminar "Free and open source solutions for geospatial data processing and representation", 2012, 2013, 2014, 2015 – Timișoara, Cluj Napoca
- Trainer in “Using 8 band multispectral satellite images” 1 – 6 September 2011, Lunca Muresului Natural Parc, Arad
- Torrential Watershed Management – Romanian Experience Workshop - May 2009, Escuela Technica Superior de Montes, Madrid
- Environmental Governance in Eastern Europe Workshop 19-21 September 2007, Jesus College, Oxford