

Curriculum vitae

INFORMAȚII PERSONALE

Mihai-Daniel Niță

✉ mihai.nita@unitbv.ro

💬 Skype mihainita84

LOCUL DE MUNCA

Universitatea Transilvania din Brașov
Conducător de doctorat – Domeniul Silvicultura din 2019

DOMENII DE COMPETENȚĂ PROFESIONALĂ / ARII DE INTERES ÎN CERCETARE

Amenajarea bazinelor hidrografice, Teledetecție, GIS,

EXPERIENȚA PROFESIONALĂ

01/10/2020–Prezent

Profesor universitar

Universitatea Transilvania din Brașov, Brașov (România)

Conducerea lucrărilor practice și a proiectului la disciplina Corectarea Torentilor. Sustinerea cursului și lucrărilor practice la disciplina Construcții hidrotehnice în amenajare bazinelor hidrografice

11/07/2022–Prezent

Membru corespondent (fost Membru asociat)

Academia de Științe Agricole și Silviculturale (ASAS)

Implicare în relațiile științifice internaționale în domeniul de activitate Silvicultură și participare la programe de cooperare tehnico-științifice naționale și internaționale.

01/10/2016–01/03/2017

Fulbright Visiting Professor

University of Wisconsin, Madison (USA)

Cercetare în Teledetecție aplicată în silvicultură

01/07/2014–01/04/2015

Membru în Comisia Tehnico-Economică Departamentul Ape Paduri

Ministerul Mediului și Schimbărilor Climatice, București (România)

Aprobare proiecte de Reconstructie Ecologică, Corectarea Torentilor, Drumuri forestiere

01/10/2012–01/10/2020

Șef de lucrări, Conferențiar universitar

Universitatea Transilvania din Brașov, Brașov (România)

Conducerea lucrărilor practice și a proiectului la disciplina Corectarea Torentilor. Sustinerea cursului și lucrărilor practice la disciplina Construcții hidrotehnice în amenajare bazinelor hidrografice

01/03/2007–Prezent **Acționar, Inginer Silvic**
SC Forest Design SRL, Brașov (România)
 - coordonare proiecte, fundraising
 - elaborare strategii de cercetare-dezvoltare

EDUCAȚIE ȘI FORMARE

22/02/2015–22/03/2015 **Junior researcher**
 Department of Forest and Wildlife Ecology - The University of Wisconsin Madison,
 Madison (Statele Unite ale Americii)
 Cercetare aplicată în cartarea habitatelor forestiere și modificarea categoriilor de folosință a pădurii
 utilizând sistemele informatice geografice (GIS), teledetecția și datele istorice privind inventarul
 forestier sub coordonarea lui Volker C. Radeloff, șeful laboratorului SILVIS (Analiza spațială pentru
 conservare și durabilitate)

19/09/2007–21/09/2007 **Environmental Governance in Eastern Europe**
 Jesus College, Oxford (Regatul Unit)

01/10/2008–01/10/2011 **Doctor în Silvicultură**
 Transilvania University of Brașov, Brașov (România)

01/10/2003–01/06/2008 **Inginer diplomat în silvicultură**
 Facultatea de Silvicultură și Exploatare Forestieră, Brașov (România)

COMPETENȚE PERSONALE

Limba(i) maternă(e) română

Limbile străine	ÎNȚELEGERE		VORBIRE		SCRIERE
	Ascultare	Citire	Participare la conversație	Discurs oral	
engleză	C2	C2	C2	C2	C2
spaniolă	A2	A2	A1	A1	A1
rusă	A1	A1	A1	A1	A2

Niveluri: A1 și A2: Utilizator elementar - B1 și B2: Utilizator independent - C1 și C2: Utilizator experimentat
[Cadru european comun de referință pentru limbi străine](#)

Proiecte

- **Project Manager** G4B: Grasslands for biodiversity: supporting the protection of the biodiversity-rich grasslands and related management practices in the Alps and Carpathians - Project manager UNITBV partner- Biodiversa+ UEFISCDI – 90k EUR out of 1,6 mil. EUR - www.grass4b.com
- **Project Manager** DNSH2: The effects of torrent control dams on the geomorphology, soil and flora of the riverbed. Case studies in the watershed of the national forest managed by the National Forest Administration – ROMSILVA – Project Manager – NFA – Romsilva – 60 k EUR
- **Project Manager** ForestPaths - Co-designing Holistic Forest-based Policy Pathways for Climate Change Mitigation. HORIZON-CL6-2022-CIRCBIO-01. Project Manager UNITBV. Horizon Europe. 130K EUR out of 5,6 mil. EUR - <https://forestpaths.eu/>
- **Project Manager** SDG-Eyes - Sustainable Development Goals – Enhanced monitoring through the family of copernicus Services - Project Manager FDR – Horizon Europe – 75K EUR out of 2.8 mil EUR = <https://sdgs-eyes.eu/>
- **Project Manager** DNSH: Study of environmental effects due to torrent control structures located in small, predominantly forested watersheds – ROMSILVA – Project Manager – NFA Romsilva – 40k EUR <https://silvic.unitbv.ro/ro/admitere/admitere-masterat/451-dronsat.html>
- **Project Manager** DRONSAT: Quantifying the dynamics of forests in the long and short term by satellite remote sensing and aerial images taken by drones – Project Manager – UNITBV - 5k EUR
- **Project Manager** Academic support services for Rectify and Mosaic 700 Corona Satellite images - Project Manager - University of Wisconsin – Madison. 25k EUR <https://lcluc.umd.edu/projects/long-term-land-degradation-caucasus>
- 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
- 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
- **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

Publicatii

Web of Science Indexed Records (Ultimii 10 ani)

- A half-century of land cover changes in the Caucasus derived from Corona spy satellite and Landsat images, Authors (11): Rizayeva, Afag; Nita, Mihai D. ... Radeloff, Volker C., Published: Mar 2025 in Regional Environmental Change, DOI: 10.1007/S10113-025-02360-6, Accession Number: WOS:001416151300001
- Analyzing the Accuracy of Satellite-Derived DEMs Using High-Resolution Terrestrial LiDAR, Authors (3): Mohamed, Aya Hamed; Keskes, Mohamed Islam; Nita, Mihai Daniel, Published: Dec 2024 in Land, DOI: 10.3390/LAND13122171, Accession Number: WOS:001387045900001
- The potential of historical spy-satellite imagery to support research in ecology and conservation Authors (12): Munteanu, Catalina; Kraemer, Benjamin M.; Nita, Mihai Daniel ... Kuemmerle, Tobias Published: Mar 2024 in BioScience DOI: 10.1093/BIOSCI/BIAE002 Web of Science accession number: WOS:001164249700001
- Tradeoffs and limitations in determining tree characteristics using 3D pointclouds from terrestrial laser scanning: A comparison of reconstruction algorithms on European bech (*Fagus sylvatica* L.) trees Authors (3): Florea, Sergiu-Constantin; Dutca, Ioan; Nita, Mihai-Daniel Published: 2024 in Annals of Forest Research Accession Number: WOS:001415847100012
- Exploring the association between adaptive and growth traits and withinindividual genetic diversity in common beech (*Fagus sylvatica*) Authors (12): Ciocirlan, Mihnea Ioan Cezar; Ciocirlan, Elena ... Curtu, Alexandru Lucian Published: 2024 in Annals of Forest Research DOI: 10.15287/AFR.2024.3885 Accession Number: WOS:001415847100010
- Measuring forest height from space. Opportunities and limitations observed in natural forests Authors (2): Baban, Gabriela; Nita, Mihai Daniel Published: Apr 2023 in Measurement DOI: 10.1016/J.MEASUREMENT.2023.112593 Web of Science accession number: WOS:000944425900001
- Accuracy of a Smartphone-based freeware solution and two shape reconstruction algorithms in log volume measurements Authors (2): Nita, Mihai Daniel; Borz, Stelian Alexandru Published: Feb 2023 in Computers and Electronics in Agriculture DOI: 10.1016/J.COMPAG.2023.107653 Web of Science accession number: WOS:000924310400001
- Impact of Iran's Forest Nationalization Law on Forest Cover Changes over Six Decades: A Case Study of a Zagros Sparse Coppice Oak Forest Authors (6): Heidarlou, Hadi Beygi; Shafiei, Abbas Banj; Nita, Mihai Daniel ... Lopez-Carr, David Published: Jan 2023 in Sensors DOI: 10.3390/S23020871 Web of Science accession number: WOS:000918960500001
- Large-area, 1964 land cover classifications of Corona spy satellite imagery for the Caucasus Mountains Authors (3): Rizayeva, Afag; Nita, Mihai D.; Radeloff, Volker C. Published: Jan 2023 in Remote Sensing of Environment DOI: 10.1016/J.RSE.2022.113343 Web of Science accession number: WOS:001026037000001
- Assessing the Fragmentation, Canopy Loss and Spatial Distribution of Forest Cover in Kakamega National Forest Reserve, Western Kenya Authors (3): Osewe, Erick O.; Nita, Mihai Daniel; Abrudan, Ioan Vasile Published: Dec 2022 in Forests DOI: 10.3390/F13122127 Web of Science accession number: WOS:000901346800001
- Electronics, Close-Range Sensors and Artificial Intelligence in Forestry Authors (4): Borz, Stelian Alexandru; Proto, Andrea Rosario ... Nita, Mihai Daniel Published: Oct 2022 in Forests DOI: 10.3390/F13101669 Web of Science accession number: WOS:000875072000001
- Does Slope Aspect Affect the Aboveground Tree Shape and Volume Allometry of European Beech (*Fagus sylvatica* L.) Trees? Authors (5): Dutca, Ioan; Cernat, Alexandra ... Nita, Mihai Daniel Published: Jul 2022 in Forests DOI: 10.3390/F13071071 Web of Science accession number: WOS:000831412100001
- Using historical spy satellite photographs and recent remote sensing data to identify high-conservation-value forests Authors (7): Munteanu, Catalina; Senf, Cornelius; Nita, Mihai Daniel ... Kuemmerle, Tobias Published: Apr 2022 in Conservation Biology DOI: 10.1111/COBI.13820 Web of Science accession number: WOS:000715903000001
- Testing Forestry Digital Twinning Workflow Based on Mobile LiDAR Scanner and AI Platform Authors (1): Nita, Mihai Daniel Published: Nov 2021 in Forests DOI: 10.3390/F12111576 Web of Science accession number: WOS:000727821700001
- Capercaillie (*Tetrao urogallus*) habitat in Romania - A landscape perspective revealed by Cold War spy satellite images Authors (3): Stancioiu, Petru T.; Nita, Mihai D.; Fedorca, Mihai Published: Aug

2021 in Science of the Total Environment DOI: 10.1016/J.SCITOTENV.2021.146763 Web of Science accession number: WOS:000655619900001

- Mapping Mature Post-Agricultural Forests in the Polish Eastern Carpathians with Archival Remote Sensing Data Authors (4): Jabs-Sobocinska, Zofia; Affek, Andrzej N. ... Nita, Mihai Daniel Published: May 2021 in Remote Sensing DOI: 10.3390/RS13102018 Web of Science accession number: WOS:000662536200001
- Tree Shape Variability in a Mixed Oak Forest Using Terrestrial Laser Technology: Implications for Mating System Analysis Authors (3): Tomsa, Vladut Remus; Curtu, Alexandru Lucian; Nita, Mihai Daniel Published: Feb 2021 in Forests DOI: 10.3390/F12020253 Web of Science accession number: WOS:000622494400001
- Ecological Monitoring with Spy Satellite Images-The Case of Red Wood Ants in Romania Authors (4): Klimetzek, Dietrich; Stancioiu, Petru Tudor ... Nita, Mihai Daniel Published: Feb 2021 in Remote Sensing DOI: 10.3390/RS13030520 Web of Science accession number: WOS:000615465500001
- Economic Valuation of Carbon Storage and Sequestration in Retezat National Park, Romania Authors (3): Pache, Robert-George; Abrudan, Ioan Vasile; Nita, Mihai-Daniel Published: Jan 2021 in Forests DOI: 10.3390/F12010043 Web of Science accession number: WOS:000610241900001
- Half a century of forest cover change along the Latvian-Russian border captured by object-based image analysis of Corona and Landsat TM/OLI data Authors (4): Rendenieks, Zigmars; Nita, Mihai D. ... Radeloff, Volker C. Published: Nov 2020 in Remote Sensing of Environment DOI: 10.1016/J.RSE.2020.112010 Web of Science accession number: WOS:000571214600001
- Cold War spy satellite images reveal long-term declines of a philopatric keystone species in response to cropland expansion Authors (9): Munteanu, Catalina; Kamp, Johannes; Nita, Mihai Daniel ... Kuemmerle, Tobias Published: May 2020 in Proceedings of the Royal Society B: Biological Sciences DOI: 10.1098/RSPB.2019.2897 Web of Science accession number: WOS:000541026500003
- Torrential flood risk assessment and environmentally friendly solutions for small catchments located in the Romania Natura 2000 sites Ciucas, Postavaru and Piatra Mare Authors (8): Tudose, Nicu Constantin; Ungurean, Cezar; Nita, Mihai Daniel ... Davidescu, Adriana Published: Jan 2020 in Science of the Total Environment DOI: 10.1016/J.SCITOTENV.2019.134271 Web of Science accession number: WOS:000500580700088
- Intentions to engage in forest law enforcement in Romania: An application of the theory of planned behavior Authors (3): Popa, Bogdan; Nita, Mihai Daniel; Halalisan, Aureliu Florin Published: Mar 2019 in Forest Policy and Economics DOI: 10.1016/J.FORPOL.2018.11.005 Web of Science accession number: WOS:000457324500004
- PERFORMANCE OF SMALL-SCALE TECHNOLOGY IN PLANTING AND CUTBACK OPERATIONS OF SHORT-ROTATION WILLOW CROPS Authors (6): Borz, S. A.; Nita, M. D. ... Proto, A. R. Published: 2019 in Journal of the ASABE DOI: 10.13031/TRANS.12961 Web of Science accession number: WOS:000458745100016
- Comparison of Global and Continental Land Cover Products for Selected Study Areas in South Central and Eastern European Region Authors (23): Manakos, Ioannis; Tomaszewska, Monika; Nita, Mihai Daniel ... Campbell, Petya Published: Dec 2018 in Remote Sensing DOI: 10.3390/RS10121967 Web of Science accession number: WOS:000455637600109
- Forestland connectivity in Romania-Implications for policy and management Authors (3): Stancioiu, Petru Tudor; Nita, Mihai Daniel; Lazar, Gabriel Ervin Published: Jul 2018 in Land Use Policy DOI: 10.1016/J.LANDUSEPOL.2018.02.028 Web of Science accession number: WOS:000435619900047
- Widespread forest cutting in the aftermath of World War II captured by broadscale historical Corona spy satellite photography Authors (5): Nita, Mihai Daniel; Munteanu, Catalina ... Radeloff, Volker C. Published: Jan 2018 in Remote Sensing of Environment DOI: 10.1016/J.RSE.2017.10.021 Web of Science accession number: WOS:000418464400023
- Forests dynamics in the montane-alpine boundary: a comparative study using satellite imagery and climate data Authors (8): Dinca, Lucian; Nita, Mihai Daniel ... Monteiro, Antonio T. Published: Aug 2017 in Climate Research DOI: 10.3354/CR01452 Web of Science accession number: WOS:000408250000010
- EVALUATION OF STREAM BED DYNAMICS FROM VIDAS TORRENTIAL VALLEY USING TERRESTRIAL MEASUREMENTS AND GIS TECHNIQUES Authors (3): Nita, Mihai-Daniel; Clinciu, Ioan; Popa, Bogdan Published: Jun 2016 in Environmental Engineering and Management

Journal DOI: 10.30638/EEMJ.2016.149 Web of Science accession number: WOS:000383100900021

- Historical forest management in Romania is imposing strong legacies on contemporary forests and their management Authors (4): Munteanu, Catalina; Nita, Mihai Daniel ... Radeloff, Volker C. Published: Feb 2016 in Forest Ecology and Management DOI: 10.1016/J.FORECO.2015.11.023 Web of Science accession number: WOS:000368753900017
- Forest Ecosystem Services Valuation in Different Management Scenarios: a Case Study of the Maramures Mountains Authors (8): Popa, Bogdan; Borz, Stelian Alexandru; Nita, Mihai Daniel ... Abrudan, Ioan Vasile Published: 2016 in Baltic Forestry DOI: 10.1177/154193121005402813 Web of Science accession number: WOS:000392367900015
- MAGNITUDE OF DAMAGE EVENTS ON HYDROTECHNICAL TORRENT CONTROL STRUCTURES Authors (3): Clinciu, Ioan; Petritan, Ion-Catalin; Nita, Mihai-Daniel Published: 2015 in Environmental Engineering and Management Journal DOI: 10.30638/EEMJ.2015.008 Web of Science accession number: WOS:000351589400008

Informatii suplimentare: <https://scholar.google.ro/citations?user=hBkhiNMAAAAJ&hl=ro>

Cărți și capitole

- **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

Asociații

- 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. Global Observation for Forest and Land Cover Dynamics (GOF-C-GOLD) is a coordinated international program working to provide ongoing space-based and in situ observations of the land surface to support sustainable management of terrestrial resources at different scales.
- **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

15.05.2025

Prof. dr. ing. Mihai-Daniel Niță