

PERSONAL INFORMATION

Iosif VOROVENCII iosif.vorovencii@unitbv.roPOSITION
IOSUD UTBVPhD Coordinator
Doctoral studies field: Silviculture
Since 2015EXPERTISE FIELD AND
RESEARCH INTEREST AREAS

Remote sensing, photogrammetry, topography, cadaster, specialized information systems, satellite geodesy

WORK EXPERIENCE

(1994- present)

Professor, PhDTransilvania University of Brasov, Eroilor Street, no. 29, Brasov, www.unitbv.ro

- Teaching activity in field of terrestrial measurements: topography, fotogrammetry, remote sensing, specialized information systems.
- Research activity - processing and interpretation of satellite and aerial images in different applications: forest health monitoring, forest fragmentation, analyse of desertification risk, monitoring the land use/land cover changes, monitoring the active mine, environmental monitoring and forest fire monitoring; using the UAV in acquisition of aerial images; perform the orthophotos after processing of aerial images, accuracy assessment of orthophotos; usinf GNSS technology în topographic and cadastral works.

(1992- 1994)

Design engineerNational Institute for Research and Development in Forestry „Marin Drăcea”, Braşov, Cloşca Street no. 13, <http://www.icasbv.ro/>).

- Design activity in watershed management and forest management planning.

(1991- 1992)

Forestry engineerForest District, Braşov, Cloşca Street no. 31, <http://brasov.rosilva.ro/>).

- Production activity

EDUCATION AND TRAINING

(2015)

HabilitationReplace with EQF
(or other) level if
relevant

Transilvania University of Braşov

- PhD Coordinator

(2010-2015)

Masters in cadastral and land management information systemsReplace with EQF
(or other) level if
relevant

“1 Decembrie 1918” University from Alba Iulia

- Cadastre, land management, digital land registry

(2006-2010)

Geodetic engineerReplace with EQF
(or other) level if
relevant

“1 Decembrie 1918” University from Alba Iulia

- Cadastre, topography, photogrammetry, geodesy, satellite geodesy, remote sensing, cartography, geographic information systems, surveying engineering, cadastral law

(2005) **PhD in silviculture**

Replace with EQF (or other) level if relevant

Transilvania University of Braşov

- Remote sensing, photogrammetry, topography, general cadastre and forest cadastre, forest management planning
- PhD in field of silviculture

(1991-1997) **Economist**

Replace with EQF (or other) level if relevant

Transilvania University of Braşov

- Marketing, management, accounting, trade economy, world trade economy

(1985-1991) **Forestry engineer**

Replace with EQF (or other) level if relevant

Transilvania University of Braşov

- Silviculture, dendrology, dendrometry, topography, forest fotogrammetry, forest roads, forest management planning, operational research, watershed management, forestry informatics.

PERSONAL SKILLS

Mother tongue Roumanian

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English language	B2	B2	B2	B2	B2
France language	B2	B2	B2	B2	B2

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2 Proficient user
[Common European Framework of Reference for Languages](#)

Communication skills

- good communication skills gained through my experience as professor and coordinator of research projects

Organisational / managerial skills

- leadership (currently responsible for a team of 35 people)
- management (currently vice-dean)

Job-related skills

- good knowledge of the study programs evaluation processes (currently being responsible for the terrestrial and cadastral measurements program and responsible for the evaluation of the masters programs)

Digital skills

SELF-ASSESSMENT				
Information processing	Communication	Content creation	Safety	Problem solving
Independent user	Independent user	Independent user	Independent user	Independent user

Levels: Basic user - Independent user - Proficient user
[Digital competences - Self-assessment grid](#)

- good knowledge of software for satellite and aerial images processing: Erdas Imagery, Idrisi (Kilimanjaro, Selva, Andes), ENVI, GRASS, LPS, ORIMA, gained in the teaching activities (remote sensing and photogrammetry) and research activities.
- good knowledge of the editing software AutoCad gained in the teaching activities (topography and specialized information systems) and in the topographic and cadastral works.
- good knowledge of the QGIS software gained in research activities.
- good knowledge of downloading topographic data software and processing software (Terramodel for Trimble and Leica Geo Office Tools for Leica total stations) and data collected through the GNSS technique (Trimble Business Center and Carlson) gained in the research activities.
- good command of office suite (word processor, spread sheet, presentation software).

Other skills

- good knowledge of topographic instruments (total stations, levels, GNSS equipments)
- good knowledge of photogrammetric instruments

ADDITIONAL INFORMATION

- Publications**
1. Vorovencii, I., 2015 – *Remote Sensing*. Matrix Rom București Publishing House. ISBN 978-606-25-0142-6. 600 pages.
 2. Vorovencii, I., 2010 – *Photogrammetry*. Matrix Rom București Publishing House. ISBN 978-973-755-580-9. 530 pages.
 3. Vorovencii, I., Pădure, I., 2010 – *Specialized Cadastre*. Transilvania University of Brasov Publishing House. ISBN 978-973-598-677-3. 237 pages.
 4. Vorovencii, I., 2006 – *Topography*. Transilvania University of Brasov Publishing House. ISBN 973-635-616-7. 364 pages.
- Projects**
1. Consultancy services for surveying, cadastral and technical documentations. Contract no. 2450/03.03.2014.
 2. Identification of communal pastures and agricultural and forest lands from the public or private domain of Fundata territorial-administrative unit that can be subject to restitution of the property right according to Law 165/2013. Contract no. 16370/12.11.2013.
 3. MSc Technology - Enhanced Learning Forest Fire Fighting (international project) (2010-2012).
 4. Forest fires – Preventing and monitoring. Proiect Erasmus – Joint Development of European Module. Reference no. Of grant Agreement 51388-IC-1-2004-1-RO-ERSAMUS-MODUC-5 (international project).
 5. Definition, assessment and risk zoning for Romanian forests (CLIDON) (Contract CEEX no. 739/2006).
 6. Technology platform of acquisition and decision support for management strategies and policies of forest resources, an integral part of national surveillance network resources. CEEX 59/10.10.2005 (Contract no. 49/2005).
 7. Research regarding the use of digital images in forest economy. Beneficiary R.N.P. Romsilva (Contract no. 57/30.06.2004).
- Conferences**
1. Ghimbășan, A.C., Vorovencii, I., Borz, S.A., 2017 - *Terrestrial photogrammetry applications in the study of different volumes located in the forest fund*. Proceedings of the Biennial International Symposium. Forest and Sustainable Development, Brașov, Romania, 7-8th October 2016, p. 47-54.
 2. Vorovencii, I., 2015 - *Monitoring deforestation and vegetation regeneration in Trotusului Valley, Romania, using change vector analysis and Landsat imagery*. Proceedings of the Biennial International Symposium, *Forest and Sustainable Development*, Brașov, Romania, 24-25th of October 2014, p. 350-355.
 3. Vorovencii, I., 2012 - *Highlighting of temperatures on Landsat 5 TM thermal infrared image*. Proceedings of the Biennial International Symposium, *Forest and Sustainable Development*, Brașov, Romania, 19-20th October 2012, p. 59-64.
 4. Vorovencii, I., Chițea, Gh., Mihăilă, M., 2010 – *Aspects regarding direct georeferencing of digital aerial images*. Proceedings of the Biennial International Symposium, *Forest and Sustainable Development*, Brașov, Romania, 15-16th October 2010, 2011, p. 573-578.
 5. Chițea, Gh., Vorovencii, I., Derczeni, R., Iordache, E., Mihăilă, M., 2010 – *Aspects regarding the possibilities to evaluate the forest stand characteristics using satellite recordings with high spatial definition*. Proceedings of the Biennial International Symposium, *Forest and Sustainable Development*, Brașov, Romania, 15-16th October 2010, 2011, p. 519-524.
 6. Vorovencii, I., 2009 - *Aspects regarding the analysis of general changes in forest found using aerial and satellite images*. *Lucrările sesiunii științifice bienale cu participare internațională Pădurea și Dezvoltarea Durabilă*, Brașov, 17-18 octombrie 2008, pp 471-478.
 7. Chițea, Gh., Vorovencii, I., Mihăilă, M., Iordache, E., Derczeni, R., 2009 - *Aspects regarding the crown's diameters and trees' height determination on satellite images of high spatial resolution*. *Lucrările sesiunii științifice bienale cu participare internațională Pădurea și Dezvoltarea Durabilă*, Brașov, 17-18 octombrie 2008, p. 495-502.
 8. Vorovencii, I., 2009 - *Modalities of presentation the accuracy of supervised classification of content of satellite images Landsat 7 ETM+*. *Lucrările sesiunii științifice bienale cu participare internațională Pădurea și Dezvoltarea Durabilă*, Brașov, 17-18 octombrie 2008, pp 463-570.
- Memberships**
1. Associate member of Academy of Agricultural and Forestry Sciences „Gheorghe Ionescu-Șișești”.
 2. Member of the European Cooperation in the Field Group of Scientific and Technical Research (COST) - *Forests, their Products and Services COST Action FP0701 – Brussels (2008-2012)*
 3. Member of the European Cooperation in the Field Group of Scientific and Technical Research (COST) – Action CA 15226 „*Climate-Smart Forestry in Mountain Regions -CLIMO*”.

H Indexes Google Scholar index: 8, Scopus index: 5, Web of Science index: 4

ANNEXES

LIST OF RELEVANT PUBLICATIONS /RESEARCH (selection)

Papers ISI Thomson Reuters:

1. Vorovencii, I., 2018 - Quantification of forest fragmentation in pre and post-establishment periods, inside and around Apuseni Natural Park, Romania. *Environmental Monitoring and Assessment*. Vol. 190, No. 6, Article 367, (FI = 1,804), (SRI = 0,710), <https://link.springer.com/article/10.1007/s10661-018-6741-0>
2. Vorovencii, I., 2017 - Applying the change vector analysis technique to assess the desertification risk in the south-west of Romania in the period 1984–2011. *Environmental Monitoring and Assessment*. Vol. 189, No. 10, Article 524, (FI = 1,687), (SRI = 0,710), <https://link.springer.com/article/10.1007/s10661-017-6234-6>
3. Vorovencii, I., 2017 - Analysis of the changes in the metropolitan area of Brasov, Romania, using Landsat multitemporal satellite images. *Environmental Engineering and Management Journal*. Vol. 16, No. 2, p. 303–316, (FI = 1,096), (SRI = 0,085), <http://eemj.eu/index.php/EEMJ/article/view/3180>
4. Vorovencii, I., 2016 - Assessing and monitoring the risk of land degradation in Baragan Plain, Romania, using spectral mixture analysis and Landsat imagery. *Environmental Monitoring and Assessment*. Vol. 188, No. 7, Article 439, (FI = 1,633), (SRI = 0,710), <https://link.springer.com/article/10.1007/s10661-016-5446-5>
5. Vorovencii, I., 2015 - Quantifying landscape pattern and assessing the land cover changes in Piatra Craiului National Park and Bucegi National Park, Romania, using satellite imagery and landscape metrics. *Environmental Monitoring and Assessment*. Vol. 187, No. 11, Article 692, (FI = 1,679), (SRI = 0,786), <https://link.springer.com/article/10.1007/s10661-015-4909-4>
6. Vorovencii, I., 2015 - Assessing and monitoring the risk of desertification in Dobrogea, Romania, using Landsat data and decision tree classifier. *Environmental Monitoring and Assessment*. Vol. 187, No. 4, Article 204, (FI = 1,679), (SRI = 0,749), <https://link.springer.com/article/10.1007/s10661-015-4428-3>
7. Vorovencii, I., 2014 - A multi-temporal Landsat data analysis of land use and land cover changes on the land surface temperature. *International Journal of Environment and Pollution*. Vol. 56, Nos. 1/2/3/4, p. 109–128 (FI = 0,303), (SRI = 0,214), <https://www.inderscience.com/info/inarticle.php?artid=67693>
8. Vorovencii, I., 2014 - A change vector analysis technique for monitoring land cover changes in Copsa Mica, Romania, in the period 1985-2011. *Environmental Monitoring and Assessment*. Vol. 186, No. 9, p. 5951–5968 (FI = 1,679), (SRI = 0,749), <https://link.springer.com/article/10.1007/s10661-014-3831-5>
9. Vorovencii, I., 2014 - Assessment of some remote sensing techniques used to detect land use/land cover changes in south-east Transylvania, Romania. *Environmental Monitoring and Assessment*. Vol. 186, No. 5, p. 2685–2699 (FI = 1,679), (SRI = 0,749), <https://link.springer.com/article/10.1007/s10661-013-3571-y>
10. Vorovencii, I., 2014 - Detection of environmental changes due to windthrows using Landsat 7 ETM+ satellite images. *Environmental Engineering and Management Journal*. Vol. 13, No. 3, p. 565–576 (FI = 1,258) (SRI = 0,111), <http://www.eemj.icpm.tuiasi.ro/issues/vol13/vol13no3.htm>
11. Vorovencii, I., 2011 - The assessment of the impact on the environment of the limestone quarries using satellite images. *Environmental Engineering and Management Journal*, Vol. 10, No. 10, p. 1511–1522 (FI = 1,004), <http://www.eemj.icpm.tuiasi.ro/issues/vol10/vol10no10.htm>

Papers ISI proceedings:

1. Vorovencii, I., Tereşneu, C.C., Vasilescu, M.M., 2014 - *Assessing the performance of relative radiometric normalization methods for some vegetation indices*. International Multidisciplinary Scientific Geoconferences, 14th GeoConference on Informatics, Geoinformatics and Remote Sensing. Vol. – Photogrammetry and Remote Sensing, 17-26 June, 2014, Albena, Bulgaria, <http://www.sgem.org/sgemlib/spip.php?article4202&lang=en>
2. Vorovencii, I., Oprea, L., Ienciu, I., Popescu, C., 2013 - *Assessment of land surface temperature from satellite data for different land use and land cover*. 13th International Multidisciplinary Scientific Geoconference SGEM 2013. Vol. II - Informatics, Geoinformatics and Remote Sensing. ISBN 978-619-7105-01-8 / ISSN 1314-2704. 16-22 June, 2013, Albena, Bulgaria, p. 571-578. DOI:10.5593/SGEM2013/BB2.V2/S10.004, <http://sgem.org/sgemlib/spip.php?rubrique186> sau <http://sgem.org/sgemlib/spip.php?article2877>.
3. Vorovencii, I., Ienciu, I., Oprea, L., Popescu, C., 2013 - *Identification of illegal loggings in Harghita Mountains, Romania, using Landsat satellite images*. 13th International Multidisciplinary Scientific Geoconference SGEM 2013. Vol. II - Informatics, Geoinformatics and Remote Sensing. ISBN 978-619-7105-01-8 / ISSN 1314-2704. 16-22 June, 2013, Albena, Bulgaria, p. 609-616. DOI:10.5593/SGEM2013/BB2.V2/S10.009, <http://sgem.org/sgemlib/spip.php?rubrique186> sau <http://sgem.org/sgemlib/spip.php?article2882>.
4. Vorovencii, I., Oprea, L., Ienciu, I., Popescu, C., 2013 - *Landsat satellite images used in identification of land use and land cover in mountain area*. 13th International Multidisciplinary Scientific Geoconference SGEM 2013. Vol. II - Informatics,

- Geoinformatics and Remote Sensing. ISBN 978-619-7105-01-8 / ISSN 1314-2704. 16-22 June, 2013, Albena, Bulgaria, p. 617-624. DOI:10.5593/SGEM2013/BB2.V2/S10.010, <http://sgem.org/sgemlib/spip.php?rubrique186> sau <http://sgem.org/sgemlib/spip.php?article2883>.
5. Vorovencii, I., Iordache, E., 2013 - *Identification and Analysis of Forest Disturbances and Fragmentation in Giurgeu Mountains, Romania, Using Landsat Data*. The sixth international scientific conference "Rural Development 2013" Innovations and Sustainability. ISSN 2345-0916. 28-29 November, 2013, Aleksandras Stulginskis University, Lithuania. p. 513-518, http://www.asu.lt/rural_development/en/49912

Papers IDB:

1. Vorovencii, I., 2016 - Soil erosion estimation for Secașelor Plateau, Romania, using the E_{30} model and Landsat imagery. *Journal of Geodesy and Cadastre, RevCAD*, No. 21, p. 187-194, http://revcad.uab.ro/upload/40_550_26Vorovencii.pdf
2. Vorovencii, I., 2014 - Assessment of NDVI for different land covers before and after atmospheric corrections. *Bulletin of the Transilvania University of Brasov, Series II – Forestry • Wood Industry • Agricultural Food Engineering*, Vol. 7(56), No. 1, p. 43-50, http://webbut.unitbv.ro/BU2014/Series%20II/BULETIN%20II%20PDF/07_VOROVENCII.pdf
3. Vorovencii, I., Muntean, D.M., 2014 - Relative radiometric normalization methods: overview and an application to Landsat images. *Journal of Geodesy and Cadastre, RevCAD*, No. 17, p. 193-200, http://revcad.uab.ro/upload/36_452_Paper25_RevCAD17_2014.pdf
4. Vorovencii, I., Oprea, L., Ienciu, I., Popescu, C., 2013 - Evaluation of land surface temperature for different land cover using Landsat TM thermal infrared band. *Annals of West University of Timisoara, Series of Chemistry*, Vol. 22, No. 1, p 1-6, http://www.elearning-chemistry.ro/awut/userfiles/magazine1_acc/01-06_Vorovencii_OpreaL.pdf