

Curriculum Vitae



PERSONAL INFORMATION

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| Name, Title | Miloš Marjanović, PhD Assistant Professor |
| Residence | Vojvode Stepe, Belgrade, Serbia |
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| Phone (office) | +381 113 219 224 |
| Date/place of birth | 20.5.1983, Požarevac, Serbia |

RESEARCH INTERESTS

Assessment of landslide susceptibility/hazard, Landslide monitoring, GIS, Remote Sensing, Machine Learning application in Engineering Geology, LiDAR application in Engineering Geology, Geostatistics.

EDUCATION

- 2008–2013 Department for Geoinformatics, Faculty of Science, Palacký University in Olomouc - PhD degree
- 2002–2008 Department for Geotechnics, Faculty of Mining and Geology, University of Belgrade, Serbia – engineering degree

RESEARCH EXPERIENCE

- 2015 German National Aeronautics and Space Research Centre (DLR), **principal investigator on the TerraSAR-X archived data utilization project:** Measuring ground displacement using InSAR techniques, GEO2806 (contact Richard Bamler, Richard.Bamler@dlr.de)
- 2014–2015 Technische Universität München, **postdoc research project of TUM Foundation Fellowship:** Application of different landslide monitoring techniques at research group Chair of Landslide Research (contact Michael Krautblatter, m.krautblatter@tum.de)
- 2012–2016 University of Belgrade (researcher), **project of Ministry of Education (Serbia):** Application of GNSS and LiDAR technology in monitoring of the terrain stability, TR 36009 (contact Biljana Abolmasov biljana@rgf.bg.ac.rs)
- 2012–2013 Palacký University in Olomouc (associate), **project of Palacký University in Olomouc:** IGA – Small Format Aerial Photographs and their application, PrF 2012 007 (contact Jana Svobodová j.svobodova@upol.cz)
- 2011–2012 Palacký University in Olomouc (associate), **project of Palacký University in Olomouc:** POHOS - Urban development and suburb changes of Olomouc city district, PrF _2010_14 (contact Jaroslav Burian jaroslav.burian@upol.cz)
- 2010–2011 Palacký University in Olomouc (associate), **project of Palacký University in Olomouc:** Continual Wireless Monitoring, FRVŠ /2010 (contact Jan Brus jan.brus@upol.cz)
- 2009–2010 University of Belgrade (associate), **project of Ministry of Education (Serbia):** Bilateral project of Croatia-Serbia on Landslide Hazard Management, 69-00-160/2009-02/12 (contact Biljana Abolmasov biljana@rgf.bg.ac.rs)
- 2009–2012 Palacký University in Olomouc (PhD student-researcher), **project of Czech Science Foundation:** Methods of artificial intelligence in GIS, 205/09/079 (contact Vít Voženilek vit.vozenilek@upol.cz)

TEACHING

- 2016 Mentoring:
- Master student Aleksandar Miladinović, BSc
- 2015 Co-mentoring Master thesis:
- Master student Lisa Krammel, BSc Chair of Landslide Research, Faculty of Civil, Geo and Environmental Engineering, Technische Universität München, Germany
- 2014 Invited lectures on: Landslide Assessment & GIS and Multispectral Image Analysis & Applications, Spring School of Department for Geoinformatics, Palacky University in Olomouc, at Lednice, Czech Republic 25-29.4.2014.
- 2014-pres. Seminar: Basic/Applied GIS, and Digital Terrain Model workshop at Petnica Science Center, Serbia
- 2013 Workshops: Basic and Applied GIS at Republic Geological Survey, Podgorica, Montenegro
- 2012–pres. Participating in teaching at Department of Geotechnics (University of Belgrade) for subjects: Principles of Engineering Geology, Engineering Geodynamics, Geostatic Calculus, Software application in Geotechnics, Geological Hazards
- 2008–2011 Participating in teaching at Department of Geoinformatics (Palacky University in Olomouc) for subjects: New Issues in Geosciences, Advanced Methods in RS, RS in Geology, GIS in Geology, Modeling in GIS
- 2002-2008 Petnica Science Center, Serbia, student-assistant in geological seminars

RESEARCH STAYS, COURSES AND SPECIALISATIONS

- 2015 JRC Institute for the Protection and Security of the Citizen (IPSC) and Institute for Environment and Sustainability (IES) (study visit two days 16-18.11.2015)
- 2015 Global Young Scientist Summit GYSS@one-north, National Research Foundation, Singapore (prestigious workshop 5 days)
- 2014 Proposal Writing, Science Craft, Technische Universität München, Munich, Germany (workshop 2 days)
- 2014 Spatial and spatio-temporal modeling of meteorological and climatic variables using Open Source software (R+OSGeo). Faculty of Civil Engineering, University of Belgrade, Serbia (workshop 3 days)
- 2013 Spatial analysis in open-source GIS environment: R+SAGA, Faculty of Civil Engineering, University of Belgrade, Serbia (workshop 1 week)
- 2011 Faculty of Mining and Geology, University of Belgrade, Serbia (research stay 3 months)
- 2011 GEOSTAT 2011, Faculty of Civil Engineering, University of Belgrade, Serbia (workshop 1 week)
- 2011 ESA Land Training Course, Krakow, Poland (summer school 2 weeks)
- 2011 CNR IRPI Institute for Hydrogeological Hazards, Perugia, Italy (research stay 2 months)
- 2010 School of environment, The University of Auckland, New Zealand (research stay 1 month)
- 2009 COST Training 3D Geo-information for Disaster Management, TU Delft, Netherlands (workshop 1 week)
- 2009 LARAM advanced landslide assessment school, Salerno, Italy (summer school 2 weeks)

PUBLICATIONS

- MARJANOVIĆ M.** (2009) Landslide susceptibility modelling: a case study on Fruška Gora Mountain, Serbia. GEOMORFOLOGIA SLOVACA ET BOHEMICA, vol. 1/2009, pp. 29-42, ISSN: 1337-6799.
- MARJANOVIĆ M., BAJAT B, KOVAČEVIĆ M.** (2009) Landslide susceptibility assessment with machine learning algorithms. In: Proceedings of International Conference on Intelligent Networking and Collaborative Systems (INCoS) 2009, 4-6 November, Barcelona, Spain, pp. 273-278, ISBN: 978-0-7695-3858-7.

- MARJANOVIĆ M.** (2010) Machine learning methods for landslide susceptibility modeling. In: *Geospatial Crossroads@GI_forum'10*, Car, Griesebner, Strobl (eds) – Proceedings of 2010 GI_forum, 6-9 July, Salzburg, Austria, pp. 150-159, ISBN: 978-3-87907-496-9.
- MARJANOVIĆ M.** (2010) Regional scale landslide susceptibility analysis using different GIS-based approaches. In: *Geologically Active*, Williams et al. (eds), Proceedings of 11th IAEG Congress, 5-10 September, Auckland, New Zealand, pp. 435-442, ISBN: 978-0-415-60034-7.
- MARJANOVIĆ M., CAHA J.** (2011) Fuzzy approach to landslide susceptibility zonation. In: Proceedings of the Annual International Workshop on DAtabases, TExts, Specifications and Objects (DATESO) 2011, 20. April, Písek, Czech Republic, pp. 181-195, ISBN: 978-80-248-2391-1.
- MARJANOVIĆ M., KOVAČEVIĆ M., BAJAT B., VOŽENÍLEK V.** (2011) Landslide susceptibility assessment using SVM machine learning algorithm. *ENGINEERING GEOLOGY*, vol. 123, pp. 225-234, ISBN: 0013-7952.
- MARJANOVIĆ M., KOVAČEVIĆ M., BAJAT B., MIHALIĆ S., ABOLMASOV B.** (2011) Landslide assessment of the Starča basin (Croatia) using machine learning algorithms. *ACTA GEOTECHNICA SLOVENICA*, vol. 2011/2, pp. 45-55, ISSN: 1854-0171.
- MARJANOVIĆ M., KOVAČEVIĆ M., BAJAT B., VOŽENÍLEK V., MAREK L.** (2011) Využití klasifikačních algoritmů metod strojového učení pro účely prostorového modelování. In: *Metody umělé inteligence v geoinformatice*, Voženílek, Dvorský, Húsek (eds), Univerzita Palackého v Olomouci, Olomouc, Czech Republic, pp. 161-168, ISBN: 978-80-244-2945-8.
- MARJANOVIĆ M., DJURIĆ U., PETROVIĆ R.** (2012) Modelovanje hazarda od klizišta različitim metodama u GIS-u. In: Proceedings of the 14th Symposium of Engineering Geology & Geotechnics DGEITS, 27-28 September, Belgrade, Serbia, pp. 469-478, ISBN: 978-86-89337-01-3.
- MARJANOVIĆ M., BURIAN J., MIŘIJOVSKÝ J., HARBULA J.** (2012) Urban Land Cover Change of Olomouc City Using LANDSAT Images. *World Academy of Science, Engineering and Technology* vol. 71, pp. 525-531, eISSN: 2010-3778.
- DJURIĆ U., MARJANOVIĆ M., ŠUŠIĆ V., PETROVIĆ R., ABOLMASOV B., ZEČEVIĆ S., BASARIĆ I.** (2013) Land-use suitability analysis of Belgrade city suburbs using machine learning algorithm. In: Proceedings of Symposium GIS Ostrava 2013 - Geoinformatics for City Transformations, 21-23 January, Ostrava, Czech Republic, pp. 49-61, ISBN: 978-80-248-2952-4.
- PETROVIĆ R., MARJANOVIĆ M., ĐURIĆ U., ŠUŠIĆ V., ABOLMASOV B., ZEČEVIĆ S.** (2013) Statistical approach in Land-Use suitability analysis of the Belgrade City suburbs. In: 2nd International Scientific Conference Regional Development, Spatial Planning And Strategic Governance RESPAG2013, 22-25 May, Belgrade, Serbia, pp. 517-529, ISBN: 978-86-80329-76-5.
- DJURIĆ U., ABOLMASOV B., PETROVIĆ D., MARJANOVIĆ M., KUZMIĆ P.** (2013) Portable geotechnics – using android smartphones and tablets for geotechnical field investigations. In: Proceedings of the 13th International Multidisciplinary Scientific Geoconference SGEM2013, 16-22 June, Albena, Bulgaria, pp. 513-520, ISBN: 978-954-91818-9-0.
- MARJANOVIĆ M.** (2013) Comparing the performance of different landslide susceptibility models in ROC space. In: *Landslide Science and Practice, Volume 1: Landslide Inventory and Susceptibility and Hazard Zoning*, Margottini, Canuti, Sassa (eds.), Springer, pp. 579-584, ISBN: 978-3-642-31324-0.
- PETROVIĆ R., ŠUŠIĆ V., ĐURIĆ U., MARJANOVIĆ M., ZEČEVIĆ S.** (2013) Primena automatizovane tehnike određivanja topografskih vododelnica analizom DEM-a. *TEHNIKA*, vol. 68/2, pp. 235-241, ISBN: 0040-2176.
- PETROVIĆ R., ŠUŠIĆ V., ĐURIĆ U., MARJANOVIĆ M., ZEČEVIĆ S.** (2013) Application of an automated technique for topographic Watershed deriving using DEM analysis. *TECHNICS*, special edition, vol. 68/2, pp. 42-48, ISSN: 0040-2176.
- MARJANOVIĆ M.** (2013) Kinematic analysis of a rock slope using terrestrial 3d laser scanning data. In: Proceedings of the 5th International Young Geotechnical Engineers Conference iYGEC 2013, 31. August-1. September, Paris, France, pp. 32-35, ISBN: 978-1-61499-296-7, doi:10.3233/978-1-61499-297-4-32.
- MARJANOVIĆ M., ABOLMASOV B., DJURIĆ U., ZEČEVIĆ S., ŠUŠIĆ V.** (2013) Basic kinematic analysis of a rock slope using terrestrial 3D laser scanning on the M-22 highway pilot site. In: *Rock Mechanics for Resources, Energy and Environment*, Kwasniewski & Lydzba (eds.), Taylor & Francis Group, London (Proceedings of the EUROCK 2013, 21-26 September, Wroslaw, Poland), pp. 679-683, ISBN: 978-1-138-00080-3.
- MARJANOVIĆ M., ABOLMASOV B., DJURIĆ U., BOGDANOVIĆ S.** (2013) Impact of geo-environmental factors on landslide susceptibility using an AHP method: A case study of Fruška Gora Mt., Serbia. *ANNALES GÉOLOGIQUES DE LA PÉNINSULE BALKANIQUE*, vol. 74, pp. 91-100, ISSN: 0350-0608.
- PEŠEVSKI I., MITOVSKI S., PAPIĆ J., MARJANOVIĆ M.** (2013) Choice of grout curtain type of dam “Rečani” on Orizarska River – Kočani. *GEOLOGICA MACEDONICA*, vol. 27, pp. 25-35, ISSN: 0352-1206.

- ABOLMASOV B., MILENKOVIĆ S., **MARJANOVIĆ M.**, ĐURIĆ U., JELISAVAC B. (2014) A Geotechnical model of the Umka landslide with reference to landslides in weathered Neogene marls in Serbia. *Landslides*, Springer (First Online) DOI:10.1007/s10346-014-0499-4.
- MARJANOVIĆ M.**, ĐURIĆ U., ABOLMASOV B., BOGDANOVIĆ S. (2014) Landslide Susceptibility Analysis of Belgrade City Area. *Landslide Science for a Safer Geoenvironment, Volume 2: Methods of Landslide Studies*, Sassa, Canuti, Yin (eds.), Springer, pp. 469-474, ISBN: 978-3-319-05049-2.
- ABOLMASOV B., MILENKOVIĆ S., JELISAVAC B., ĐURIĆ U., **MARJANOVIĆ M.** (2014) IPL Project 181: Study of Slow Moving Landslide Umka Near Belgrade, Serbia. *Landslide Science for a Safer Geoenvironment, Vol.1: The International Programme on Landslides (IPL)*, Sassa, Canuti, Yin (eds.), Springer, pp. 75-80, ISBN: 978-3-319-04998-4.
- ABOLMASOV B., MILENKOVIĆ S., JELISAVAC B., ĐURIĆ U., **MARJANOVIĆ M.** (2014) Mechanism and Dynamics of Umka Landslide, Belgrade, Serbia. *Landslide Science for a Safer Geoenvironment, Vol.1: The International Programme on Landslides (IPL)*, Sassa, Canuti, Yin (eds.), Springer, pp. 297-302, ISBN: 978-3-319-04998-4.
- BOGDANOVIĆ S., **MARJANOVIĆ M.**, ABOLMASOV B., ĐURIĆ U., PEJIĆ M. (2014) Applying Terrestrial Laser Scanning in Geotechnical Engineering. In: *Proceedings of 4th Symposium of Macedonian Association for Geotechnics*, 25-28 June, Struga, FYR of Macedonia, pp. 337-342, ISBN: 978-9989-2053-3-0.
- RADIĆ Z., ĐURIĆ U., **MARJANOVIĆ M.** (2014) Systematization of Geotechnical Parameters of Some Belgrade Sediments in GIS Environment. In: *Proceedings of 4th Symposium of Macedonian Association for Geotechnics*, 25-28 June, Struga, FYR of Macedonia, pp. 427-432, ISBN: 978-9989-2053-3-0.
- MARJANOVIĆ M.** (2014) Predicting Daily Air Temperatures by Support Vector Machines Regression, In: *Proceedings of DailyMeteo.org/2014 Conference*, 26-27 June, Belgrade, Serbia, pp. 86-91, ISBN: 978-86-7518-169-9.
- MARJANOVIĆ M.**, ZEČEVIĆ S., BASARIĆ I. (2014) On Perspectives of Semi-Automated Landslide Assessment. In: *Landslide and Flood Hazard Assessment, Proceedings of the 1st Regional Symposium on Landslides in the Adriatic-Balkan Region*, 6-9 March 2013, Zagreb, Croatia, pp. 231-236. ISBN: 978-953-6923-26-7.
- MARJANOVIĆ M.**, ĐURIĆ U., ABOLMASOV B., BOGDANOVIĆ S. (2014) Preliminary Analysis and Monitoring of the Rock Slope on the M-22 Highroad Near Ljig in Serbia, Using LiDAR Data. *Engineering Geology for Society and Territory - Landslide Processes, Volume 2: Landslide Processes*, Lollino, Giordan, Crosta, Corominas, Azzam, Wasowski, Sciarra (eds.), Springer, pp. 147-150, ISBN 978-3-319-09056-6.
- MARJANOVIĆ M.**, Čaha J., Miřijovský J. (2014) Proposition of a Landslide Monitoring System in Czech Carpathians. *Engineering Geology for Society and Territory - Landslide Processes, Volume 2: Landslide Processes*, Lollino, Giordan, Crosta, Corominas, Azzam, Wasowski, Sciarra (eds.), Springer, pp. 139-142, ISBN 978-3-319-09056-6.
- MARJANOVIĆ M.** (2014) *Conventional and Machine Learning methods for landslide assessment in GIS*. 1st edition, Palacký University in Olomouc, Czech Republic, (monograph) ISBN: 978-80-244-4169-6.

MISCELLANEOUS

- Awards**
- Award of Milan Milićević Foundation 2014 (for the best research work of young scientist in geology in 2013)
 - The Deans Award 2012 (Palacký University in Olomouc) for contribution: *Metody umělé inteligence v geoinformatice*, Voženilek, Dvorský, Húsek (eds), Univerzita Palackého v Olomouci, ISBN: 978-80-244-2945-8.
 - Dositeja award of Ministry of Education and Sport of Republic of Serbia for academic excellence in 2009/10, 2010/11, 2011/12.
 - Ministry of Education and Sport of Republic of Serbia, scholarship for 2008-2010.
 - Mihailo Pupin Foundation award 2008.
 - Studenica Foundation award 2007.
 - EFG Eurobank award 2007.
 - The best student award 2006. and 2005. Faculty of Mining and Geology.

Languages **Serbian** – mother tongue
English – fluent spoken and proficient writing, TOEFL certificate (102/120 points for reading, listening, speaking and writing)
Czech, Italian – basic level

Organizing - 3D Terrestrial Laser Scanning Technology in Geosciences - Commission (No. 19) of The International Association for Engineering Geology and the Environment (IAEG) (<http://www.iaeg.info/>): secretary
- 2nd Regional Symposium on Landslides in the Adriatic-Balkan Region (ReSyLAB) May 14-16, 2015, Belgrade, Serbia (<http://www.resylab2015.rgf.rs/>): organizing committee member
- IAEG XII Congress, Sep 15-19, 2014, Torino, Italy (<http://www.iaeg2014.com/>): co-convening the session *2.1 Advanced landslide field instrumentation and monitoring*.
- GIS Day Serbia 2013, Nov 20, 2013, Belgrade, Serbia (<http://gisday.rgf.rs/>): organizing committee member

Membership - International Association of Engineering Geologists (IAEG)
- Serbian Geological Society

Computer skills **GIS platforms** (ArcGIS 9+, SAGA,QGIS), **Remote Sensing platforms** (IDRISITaiga, ERDASImagine9+), **engineering and modeling** (COLTOP3D, GeomagicStudio12 for point cloud analysis, GeoSLOPEOffice5+ for slope stability modeling, Phase2 for stress and strain analysis, Grapher/Surpher8.0, AutodeskMap suite), **Geostatistical and Machine Learning platforms** (R, Weka3+), **other software** (PhotoshopCS+, MSOffice97)

Driving B-category license