PERSONAL INFORMATION

Admir Mulahusić

Patriotske lige 30, 71000 Sarajevo, Bosna i Hercegovina
+387 33 278 458
admir_mulahusic@gf.unsa.ba, amulahusic@gmail.com
www.gf.unsa.ba

Sex Muški | Date of birth 17/10/1969 | Nationality BiH

WORK EXPERIENCE

2021 – today	Full Professor University of Sarajevo, Faculty of Civil Engineering, Patriotske lige 30, 71000 Sarajevo • Course leader for undergraduate, graduate, and doctoral studies in geodesy and geoinformatics Business or sector Higher education and scientific research.
2015 – 2021	Associate Professor University of Sarajevo, Faculty of Civil Engineering, Patriotske lige 30, 71000 Sarajevo • Course leader for undergraduate, graduate, and doctoral studies in geodesy and geoinformatics Business or sector Higher education and scientific research.
2010 – 2015.	Assistant Professor University of Sarajevo, Faculty of Civil Engineering, Patriotske lige 30, 71000 Sarajevo • Course leader for undergraduate, graduate, and doctoral studies in geodesy and geoinformatics Business or sector Higher education and scientific research.
2010 – now	Head of the Geodesy and Geoinformatics Department of the Faculty of Civil Engineering at the University of Sarajevo University of Sarajevo, Faculty of Civil Engineering, Patriotske lige 30, 71000 Sarajevo ▪ Performs all tasks related to the management of the Department. Business or sector Higher education and scientific research.
2004 – now	Head of the Institute for Geodesy and Geoinformatics, Faculty of Civil Engineering, University of Sarajevo University of Sarajevo, Faculty of Civil Engineering, Patriotske lige 30, 71000 Sarajevo ▪ Performs all tasks related to the management of the Institute . Business or sector Higher education and scientific research.
2006 – 2010.	Senior Teaching Assistant University of Sarajevo, Faculty of Civil Engineering, Patriotske lige 30, 71000 Sarajevo ▪ Senior assistant in subjects from scientific fields: "Geodesy" and "Photogrammetry and cartography". Business or sector Higher education and scientific research.

2000 – 2006.	Teaching Assistant University of Sarajevo, Faculty of Civil Engineering, Patriotske lige 30, 71000 Sarajevo • Teaching assistant in subjects from scientific fields: "Geodesy" and "Photogrammetry and cartography". Business or sector Higher education and scientific research.
January 2000 – June 2000.	Senior expert associate for geodetic and property legal affairs Municipality Novo Sarajevo, Zmaja od Bosne 55, 71000 Sarajevo ▪ Geodetic work in the domain of property and legal relations Business or sector Geodesy
1997 – 1999.	Geodetic engineer Anton Kikas Limited (Canada) ▪ Designing, supervision, consulting and engineering in geodesy. Business or sector Geodesy
1996 – 1997.	Geodetic engineer IDG Stanley (Canada) ▪ Designing, supervision, consulting and engineering in geodesy. Business or sector Geodesy

EDUCATION

2010.	PhD, Doctor of Technical Sciences University of Sarajevo, Faculty of Civil Engineering, Patriotske lige 30, 71000 Sarajevo ▪ Title of doctoral dissertation : *Using of high resolution satellite images for the urban planning.*
2006.	Master of Technical Sciences in Geodesy University of Sarajevo, Faculty of Civil Engineering, Patriotske lige 30, 71000 Sarajevo ▪ Title of master's thesis: *Cartography of Sarajevo.*
1993.	Graduated engineer in geodesy (Master of Geodesy) Univerzitet u Sarajevu, Građevinski fakultet ▪ Title of the thesis: *Leveling a given high-accuracy leveling network with the introduction of orthometric corrections.*

PERSONAL SKILLS

Mother tongue: Bosnian

Other languages

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Listening	
Engleski	B2	B2	B2	B2	B2

Slovenian language: passive knowledge of the language.

Communication skills	Strong communication skills developed through extensive experience in teaching at the university level, delivering presentations at academic conferences, engaging in collaborative scientific research and professional projects, and organizing study program promotions and outreach activities. Proven ability to convey complex information clearly to diverse audiences, both in academic and public settings.

Organisational / managerial skills	Extensive experience in managing and leading both international and national scientific and professional projects. Skilled in organizing scientific and professional conferences, efficient management of editorial processes and team leadership in the role of Editor-in-Chief of the journal *Geodetski glasnik*. Proven ability in academic mentorship, including supervision of students in seminar papers, elective courses, bachelor's and master's theses, diploma projects, and doctoral dissertations. Mentorship and supervision of candidates during the preparation for state qualifying exam. Adept at coordinating multidisciplinary teams and academic activities with a focus on quality, efficiency, and innovation.

Job-related skills	Extensive experience in planning, organizing, and delivering academic instruction at the university level. Proven ability to collaborate effectively with relevant institutional, industry, and academic stakeholders. Active involvement in scientific research and professional projects, with a strong track record of contributing to interdisciplinary initiatives. Participation in various academic and administrative committees, demonstrating a commitment to institutional development and governance.

Digital Skills	Self-assessment				
	Information Processing	Communication	Content Creation	Safety	Problem Solving
	Proficient User	Proficient User	Proficient User	Proficient User	Proficient User

Other skills	1. He is a member of the International Editorial Board of the scientific journal "Geoplanning : Journal of Geomatics and Planning" (E-ISSN: 2355-6544), from 2017. (https://ejournal.undip.ac.id/index.php/geoplanning/about/editorialTeam). 2. He is a member of the International Editorial Board of the scientific journal "Geodetic courier" (Geodetski glasnik) (from 2011.). 3. Technical Editor of the scientific journal "Geodetic courier" (Geodetski glasnik) (from 2011. until 2019.). 4. He is a reviewer of the following scientific journals: a) "ISPRS International Journal of Geo-Information" (Publisher : MDPI), b) "Remote Sensing" (Publisher : MDPI), c) "Sensors" (Publisher : MDPI), d) "Applied Sciences" (Publisher : MDPI),

	e) "Lecture Notes in Networks and Systems" (Publisher : Springer; Springer Nature), f) "Zeitschrift für Geomorphologie" (Publisher: Schweizerbart Science Publishers), g) "Geodetski vestnik" (Publisher: Zveza geodetov Slovenije - Association of Surveyors of Slovenia), h) "Geodetski list" (Publisher: Hrvatsko geodetsko društvo - Croatian Geodetic Society), i) "Tehnički Vjesnik/Technical Gazette" (Publisher: Scientific professional Journal of technical faculties of the Josip Juraj Strossmayer University of Osijek), j) "Geodetic courier" (Geodetski glasnik) (Publisher: Savez udruženja građana geodetske struke u Bosni i Hercegovini - Union of Associations of Geodetic Professionals in Bosnia and Herzegovina. k) "AGG+" Časopis za arhitekturu, građevinarstvo, geodeziju i srodne naučne oblasti; AGG+ Journal for Architecture, Civil Engineering, Geodesy and Related Scientific Fields . (Publisher: Arhitektonsko-građevinsko-geodetski fakultet Univerziteta u Banjoj Luci). 5. Reviewer at the following international conferences : a) 13th International Scientific / Professional Conference AGRICULTURE IN NATURE AND ENVIRONMENT PROTECTION, 07th – 09th September, 2020, Osijek, Croatia. b) 54. hrvatski & 14. međunarodni simpozij agronoma (Vodice, Hrvatska), 2019. godine.
Driving licence	B

ADDITIONAL INFORMATION

Research projects	1. *GEOCONNECT – Connecting Geospatial Expertise for Responsible Governance* (an international project financed by the Government of the Netherlands), period 2025 – ongoing, project associate 2. *Environmental Protection Using Radar Interferometry*, national scientific research project funded by the Federal Ministry of Education and Science and UNDP, period: 2024– ongoing, project leader. 3. *Geodesy in the management of renewable energy sources, a national scientific research project financed by the Federal Ministry of Education and Science*), period: 2024 – 2025, project associate. 4. *Unmanned Multispectral Aerial Imaging for the Preservation of Agriculture in the Federation of Bosnia and Herzegovina*, national scientific research project funded by the Federal Ministry of Education and Science, period: 2024 – 2025, project associate. 5. *A method for evaluating the geometric accuracy of heritage building reconstruction based on terrestrial geospatial positioning*, national scientific research project funded by the Federal Ministry of Education and Science, period: 2023 – 2024, project associate. 6. *The role of georadar technology in improving the quality of life in urban areas: the case of Sarajevo Canton (a national scientific research project financed by the*

Ministry of Science, Higher Education and Youth of Sarajevo Canton), period: 2023 – 2024, project leader.

7. *A new method of digital transformation of cultural and historical heritage data*, national scientific research project funded by the Federal Ministry of Education and Science, period: 2022 – 2023, project associate .
8. *Improvement of the geospatial data management system of utility infrastructure cadastre through the application of GPR*, national scientific research project funded by the Ministry of Science, Higher Education and Youth of the Sarajevo Canton, period: 2022 – 2023, project associate.
9. *Improvement of the geospatial data management system of utility infrastructure cadastre through the application of GPR*, national scientific research project funded by the Ministry of Science, Higher Education and Youth of the Sarajevo Canton, period: 2022 – 2023, project associate.
10. *Application of satellite imagery in monitoring agricultural drought*, bilateral scientific research project within the framework of scientific and technological cooperation between Slovenia and Bosnia and Herzegovina, funded by the Federal Ministry of Education and Science and the Ministry of Education, Science and Sport of the Republic of Slovenia,period: 2019 – 2022, project leader in Bosnia and Herzegovina.
11. *Application of modern remote sensing methods for monitoring existing and detecting new waste disposal sites in the Sarajevo Canton*, national scientific research project funded by the Ministry of Science, Higher Education and Youth of the Sarajevo Canton, period: 2020 – 2021, project associate
12. Erasmus+: *Development of master curricula for natural disasters risk management in Western Balkan countries – NatRisk*, period 2016 – 2019, project associate.
13. *Improvement of spatial information infrastructure through optimal geodata transformations*, national scientific research project funded by the Federal Ministry of Education and Science period: 2016 – 2018, project associate.
14. GEOWEB – *Modernising Geodesy Education in Western Balkan with focus on competences and learning outcomes* (ERASMUS + project), period: 2015 – 2018, project associate.
15. *Historical geography of the medieval fortress Kaštel / Fenarlik: cartographic monuments. The institution that started the project is BZK Preporod Novi Travnik*, period 2015 –2016, project associate.
16. *Satellite thermal monitoring of the urban heat island* (international bilateral scientific research project within the scientific and technological cooperation between Slovenia and BiH, financed by the Federal Ministry of Education and Science and the Ministry of Education, Science and Sports of the Republic of Slovenia), period 2016 – 2017, project leader in Bosnia and Herzegovina.
17. *Object-oriented mapping of urban areas in case of natural disasters (international bilateral scientific and research project within the scientific and technological cooperation between Slovenia and BiH, financed by the Federal Ministry of Education and Science and the Ministry of Education, Science and Sports of the Republic of Slovenia),* period 2014 – 2015, project leader in Bosnia and Herzegovina.
18. *Practical use of lidar technology* (*international bilateral scientific and research*

	project within the scientific and technological cooperation between Slovenia and BiH, financed by the Federal Ministry of Education and Science and the Ministry of Education, Science and Sports of the Republic of Slovenia), period 2012 – 2013, project leader in Bosnia and Herzegovina . 19. *Strengthening and Development of Earth Observation Activities for the Environment in the Balkan Area (OBSERVE)* (international scientific research FP7 project, financed by the EU), period 2010 – 2012, project leader in Bosnia and Herzegovina. 20. *Use of high definition satellite images for regional and urban planning – Canton and town of Sarajevo case study* (*international bilateral scientific and research project within the scientific and technological cooperation between Slovenia and BiH, financed by the Federal Ministry of Education and Science and the Ministry of Education, Science and Sports of the Republic of Slovenia*), period 2008 – 2009, project leader in Bosnia and Herzegovina.
Professional associations membership	1. International Union of Geodesy and Geophysics (IUGG). Member of the National Committee for the Bosnia and Herzegovina (Adhering Organization Savez udruženja građana geodetske struke Bosne i Hercegovine – Union of Associations of Geodetic Professionals in Bosnia and Herzegovina). Member of the national committee and secretary (2015. – 2019.) 2. International Union of Geodesy and Geophysics (IUGG). Member of the National Committee for the Bosnia and Herzegovina (Adhering Organization Academy of Sciences & Arts of Bosnia & Herzegovina). Member of the national committee and secretary (2004. – 2014.). 3. Commission for Geodesy and Geophysics of the Academy of Sciences and Arts of Bosnia and Herzegovina. Period: 2001. – 2013.; Secretary of the Commission, period 2005. – 2013. 4. Union of Associations of Geodetic Professionals in Bosnia and Herzegovina (Savez udruženja građana geodetske struke Bosne i Hercegovine). Member of the Presidency (period 30.09.2004. – …), and from the end of 2007. godine until the end of 2019. President of the Association. 5. Association of Surveyors of Sarajevo Canton (Udruženje geodeta kantona Sarajevo). Member of the Executive Board in the field of education (period 25.01.2003. – …).
Honours and awards	• University of Sarajevo Awards for Scientific Research in 2022. • University of Sarajevo Awards for Scientific Research in 2020. • University of Sarajevo Awards for Scientific Research in 2017. • Plaque from the Memorial Fund of the Faculty of Civil Engineering in Sarajevo for the best academic achievement, 1990.
Reviews	• Journals indexed in the WoS database: Remote Sensing (MDPI), Sensors (MDPI), Applied Sciences (MDPI), ISPRS International Journal of Geo-Information (MDPI), Zeitschrift für Geomorphologie, Lecture Notes in Networks and Systems (Springer; Springer Nature), Geodetski vestnik, Technical Gazette (Tehnički Vjesnik),

	Geodetski list. • Journals indexed in the EBSCO database: Geodetski glasnik.
RESEARCHER PROFILES	• Scopus: https://www.scopus.com/authid/detail.uri?authorId=24781214800 • ORCID: https://orcid.org/0000-0002-9727-8708 • Google Scholar: https://scholar.google.com/citations?user=Rpmp3scAAAAJ&hl=en • ResearchGate: https://www.researchgate.net/profile/Admir_Mulahusic
Professional development (workshops, trainings)	1. Digital Mapping and Advanced Image Processing, covering the following topics: Hyperspectral remote sensing, Digital mapping using LiDAR data, Digital mapping using UAVs and Object Based Image Analysis (OBIA). The training was held at the University of Leon (Universidad de León - Ponferrada Campus) in Spain. Period: from 04.04. until 15.04.2016. godine (total: 65 hours). Place: Leon (Spain). 2. Earth Observation Activities in the Balkans: Building on Expeiriences, Solun-Greece, 2012. 3. Towards Inclusion of Balkan Countries into Global EO Initiatives Workshop, Split-Croatia, 2012. 4. 2nd OBSERVE Caravan training workshop, Beograd, Serbia, 2012. 5. Earth Observations for the Social Benefit of the Balkans Post-GEO Workshop, Istanbul, Turska, 2011. 6. Training for working with automated geodetic instruments, Sarajevo, B&H, 2011. 7. 2nd ISPRS WG VI/5 & SC Summer School in Slovenia "Theory and applications of Laser Scanning", Ljubljana, Slovenia, 2007. 8. Individual training course on establishing digital topographic maps at PASCO corporation. The training was held under the auspices of the Japan International Cooperation Agency (JICA) under the International cooperation programme of the Government of Japan. Period: from 16.02. until 19.03. 2004. godine. Place: Tokyo (Japan). 9. Digital photogrammetric workstations, modern technology in digital terrain modelling, application in GIS, architectural photogrammetry. The training was held thanks to the support of the Republic of Austria, Federal Ministry of Science and Research, WUS Austria, OAD, TU Vienna (Institute of Photogrammetry and Remote Sensing). Place: Vienna, Austria, TU Vienna. Period: from 06.11. until 06.12.2000.

BIBLIOGRAPHY	

Books and monographs	1. Nedim Tuno, Jusuf Topoljak, **Admir Mulahusić** (2024). 50 godina Odsjeka za geodeziju i geoinformatiku Građevinskog fakulteta Univerziteta u Sarajevu,

	Građevinski fakultet Univerziteta u Sarajevu. ISBN: 978-9958-638-74-9 – monograph. 2. Nedim Tuno, Jusuf Topoljak, **Admir Mulahusić** (2024). Prof.dr.sc. Faruk Selesković (1939 – 2003): lik i djelo, Savez udruženja građana geodetske struke u Bosni i Hercegovini. ISBN: 978-9926-8804-2-2 – monograph . 3. Nedim Tuno, Jusuf Topoljak, **Admir Mulahusić** (2023). Geodetska nastava i obrazovanje u Sarajevu 1890-1960., Savez udruženja građana geodetske struke u Bosni i Hercegovini. ISBN: 978-9926-8804-0-8 – monograph . 4. Nedim Tuno, Jusuf Topoljak, **Admir Mulahusić** (2023). Viša geodetska škola u Sarajevu 1960-1974., Savez udruženja građana geodetske struke u Bosni i Hercegovini. ISBN: 978-9926-8804-1-5 – monograph . 5. **Admir Mulahusić**, Tomaž Ambrožič, Jusuf Topoljak, Nedim Tuno (2021). Inžinjerska geodezija u rudarstvu, Građevinski fakultet Univerziteta u Sarajevu i Fakulteta za gradbeništvo in geodezijo Univerza v Ljubljani . ISBN: 978-961-6884-76-1 i 978-9958-638-67-1 – knjiga (textbook). 6. Amir Hajdar, Nedim Tuno, **Admir Mulahusić**, Smiljan Tukić (2018). Osnove programiranja za građevinske i geodetske inžinjere, Građevinski fakultet Univerziteta u Sarajevu. ISBN: 978-9958-638-54-1 – Book (university textbook). 7. Žiga Kokalj, Ralf Hesse, **Admir Mulahusić** (2018). Vizuelizacija rasterskih podataka laserskog skeniranja iz zraka, Založba ZRC. ISBN (elektronski): 978-961-05-0100-8; ISBN: 978-961-05-0099-5 – monograph. 8. **Admir Mulahusić**, Jusuf Topoljak, Nedim Tuno (2017). Geodezija za građevinske inžinjere, Univerzitet u Zenici. ISBN: 978-9958-639-94-4 – book (university textbook). 9. Krištof Oštir., **Admir Mulahusić** (2014). Daljinska istraživanja. Građevinski fakultet, Univerzitet u Sarajevu. ISBN 978–9958–638–42–8. COBISS.BH-ID 21299462 – knjiga (textbook). 10. **Admir Mulahusić**, Nedim Tuno, et al (2012): Roadmap and Strategy plan – Bosnia and Herzegovina. Observe, Roadmap and Strategy plan for strengthening EO capacity in the Balkans for environmental monitoring: Executive Summary, Thessaloniki, Greece, october 2012. ISBN: 978-618-80291-0-1 – monograph . (chapter) 11. **Admir Mulahusić** (2007). Kartografija Sarajeva. Građevinski fakultet, Univerzitet u Sarajevu. ISBN: 978-9958-638-13-8 – Book / monograph.
Book translation	1. Kraus K. (2006): Fotogrametrija. Synopsis, Zagreb, Sarajevo, 2006. – co-author of the book translation is **Admir Mulahusić**.
Articles published in scientific journals indexed in the Web of Science Core Collection citation databases	1. Pleterski, Ž., Ambrožič, T.**, Mulahusić, A.**, Tuno, N., Topoljak, J., Hajdar, A., Hamzić, A., Đidelija, M., Kulo, N., Rak, G., Marjetič, A., Kregar, K. (2025). . *Geodetski vestnik, 69* (2), 115-147. https://geodetski-vestnik.com/en/clanek/10.15292/geodetski-vestnik.2025.02.115-147

2. Tuno, N., Marinković, G., **Mulahusić, A.**, Topoljak, J., Kogoj, D., Savšek, S. (2025). Smartphone-based digitization of historical built heritage documentation. Journal of Cultural Heritage, 73, 409-418. https://doi.org/10.1016/j.culher.2025.04.024

3. Hamzić, A., Kulo, N., Đidelija, M., Tuno, N., Topoljak, J., **Mulahusić, A.**, Ambrožič, T. (2025). Inclination Assessment of Objects with Circular Base Using Algebraic Circle Fitting, Linear Regression, and Bootstrapping. Journal of Surveying Engineering, 151 (3), 05025001. https://doi.org/10.1061/JSUED2.SUENG-1564

4. Hamzić, A., Kulo, N., Đidelija, M., Topoljak, J., **Mulahusić, A.**, Tuno, N., Ademović, N. (2025). Assessment of Minaret Inclination and Structural Capacity Using Terrestrial Laser Scanning and 3D Numerical Modeling: A Case Study of the Bjelave Mosque. Geomatics, 5(1), 8. https://doi.org/10.3390/geomatics5010008

5. Tuno, N., Kulo, N., Perić, D., Đidelija, M., Hamzić, A., Topoljak, J., **Mulahusić, A.**, Kogoj, D. (2024). Analyzing Depth Uncertainty of Near-Shore Bathymetric Survey Conducted by Single-Beam Echo Sounder. *Technical Journal*, *18*, si1, 84-91. https://doi.org/10.31803/tg-20241008141610

6. Tuno, N., Kljajić, I., Demirović, A., **Mulahusić, A.**, Topoljak, J. (2024). Analiza softverskih rješenja za georektifikaciju rasterskih slika kartografskog prikaza. *Geodetski List, 78 (101)* (2), 77–100. https://hrcak.srce.hr/320021

7. Đidelija, M., Kulo, N., **Mulahusić, A.**, Tuno, N., Topoljak, J. (2023). Correlation analysis of different optical remote sensing indices for drought monitoring: a case study of Canton Sarajevo, Bosnia and Herzegovina. *Environmental Monitoring and Assessment 195*, 1338. https://doi.org/10.1007/s10661-023-11930-2

8. Radočaj, D., Tuno, N., **Mulahusić, A.,** Jurišić, M. (2023). Evaluation of Ensemble Machine Learning for Geospatial Prediction of Soil Iron in Croatia. *Poljoprivreda*, *29*, (2), 53-61. https://doi.org/https://doi.org/10.18047/poljo.29.2.7

9. Đidelija, M., Kulo, N., **Mulahusić, A.**, Tuno, N., Topoljak, J. (2022). Segmentation scale parameter influence on the accuracy of detecting illegal landfills on satellite imagery. A case study for Novo Sarajevo. *Ecological Informatics, 70*, 101755. https://doi.org/10.1016/j.ecoinf.2022.101755

10. Ćatić, J., Tuno, N., **Mulahusić, A.**, Topoljak, J., Đidelija, M., Kogoj, D. (2022). Impact of Rover Pole Holding on the Positioning Accuracy of RTK-GNSS.

Journal of Surveying Engineering, 148 (4), 05022003. https://doi.org/10.1061/(ASCE)SU.1943-5428.0000404

11. Tuno, N., **Mulahusić, A.**, Topoljak, J., Đidelija, M. (2022). Evaluation of handheld scanner for digitization of cartographic heritage. *Journal of Cultural Heritage, 54*, 31-43. https://doi.org/10.1016/j.culher.2022.01.008

12. **Mulahusić, A.**, Gajski, D., Tuno, N., Topoljak, J., Đidelija, M., Ćatić, J., Kogoj, D. (2022). Quality Evaluation of 3D Heritage Monument Models Derived from Images Obtained with Different Low-Cost Unmanned Aerial Vehicles. *Geodetski list, 76 (99)* (1), 7-23. https://hrcak.srce.hr/275234

13. **Mulahusić, A.**, Kljajić, I., Tuno, N., Topoljak, J., Kulo, N. (2021). Srednjovjekovne tvrđave prikazane na analognim katastarskim planovima stare i nove izmjere Bosne i Hercegovine. *Geodetski list, 75 (98)* (4), 345-364. https://hrcak.srce.hr/272211

14. **Mulahusić, A.**, Kljajić, I., Tuno, N., Topoljak, J. Đidelija, M. (2021). Bosanskohercegovački samostani, medrese i manastiri na analognim katastarskim planovima stare i nove izmjere. *Geodetski list, 75 (98)* (2), 117-142. https://hrcak.srce.hr/261115

15. Tuno, N., **Mulahusić, A.**, Savšek, S., Kogoj, D. (2021). Testiranje in izboljšava horizontalne datumske transformacije: študija primera v Bosni in Hercegovini. *Geodetski vestnik, 65* (1), 13-26. https://doi.org/10.15292/geodetski-vestnik.2021.01.13-26

16. Tuno, N., Savšek, S., **Mulahusić, A.**, Kogoj, D. (2020). Elektronski teodoliti – razvoj in klasifikacija. *Geodetski vestnik, 64* (2), 182-197. https://doi.org/10.15292/geodetski-vestnik.2020.02.182-197

17. **Mulahusić, A.**, Tuno, N., Gajski, D., Topoljak, J. (2020). Comparison and analysis of results of 3D modelling of complex cultural and historical objects using different types of terrestrial laser scanner. *Survey Review, 52*:371, 107-114. https://doi.org/10.1080/00396265.2018.1528758

18. Ambrožič, T., **Mulahusić, A.**, Tuno, N., Topoljak, J., Hajdar, A., Kogoj, D. (2019). Deformacijska analiza v geodetskih mrežah z robustnimi metodami. *Geodetski vestnik, 63* (2), 163-178. https://doi.org/10.15292/geodetski-vestnik.2019.02.163-178

19. Tuno, N., **Mulahusić, A.**, Savšek, S., Kogoj, D. (2019). Pet generacij integriranih elektronskih tahimetrov. *Geodetski vestnik, 63* (1), 41-56. https://doi.org/10.15292/geodetski-vestnik.2019.01.41-56

20. Tuno, N., **Mulahusić, A.**, Topoljak, J. (2018). Komparativna analiza različitih pristupa korigiranju geometrijskih distorzija stare šumarske karte. *Šumarski list, 142* (1-2), 287-295. https://doi.org/10.31298/sl.142.5-6.3

21. **Mulahusić, A.**, Tuno, N., Topoljak, J., Kolić, T., Kogoj, D. (2018). Satelitsko termično snemanje Sarajeva. *Geodetski vestnik, 62* (2), 173-185. http://dx.doi.org/10.15292//geodetskivestnik.2018.02.173-187

22. Tuno, N., Topoljak, J., Ademović, N., **Mulahusić, A.** (2018). A Simulation Analysis on the Expected Horizontal Accuracy of a Bridge Stakeout. *Tehnički vjesnik, 25* (1), 285-293. https://doi.org/10.17559/TV-20161115105536

23. Tuno, N., **Mulahusić, A.**, Topoljak, J., Kogoj, D. (2017). Vrednotenje postopkov za ocenjevanje točnosti georeferenciranja geodetskih načrtov. *Geodetski vestnik, 61* (3), 373-386. http://dx.doi.org/10.15292//geodetski-vestnik.2017.03.373-386

24. Topoljak, J., Lapaine, M., Tuno, N., **Mulahusić, A.** (2017). Analiza vanjskih elemenata sadržaja katastarskih planova stare izmjere Bosne i Hercegovine. *Geodetski list, 71 (94)* (1), 55-76. https://hrcak.srce.hr/181984

25. Tuno, N., **Mulahusić, A.**, Kogoj, D. (2017). Improving the Positional Accuracy of Digital Cadastral Maps through Optimal Geometric Transformation. *Journal of Surveying Engineering, 143* (3), 1-12. http://dx.doi.org/10.1061/(ASCE)SU.1943-5428.0000217

26. Tuno, N., **Mulahusić, A.**, Topoljak, J., Elezović, A. (2017). Ispitivanje položajne točnosti granica šumskih područja dobivenih objektno–orijentiranom klasifikacijom multispektralnih snimaka. *Šumarski list, 141* (1-2), 29-38. https://doi.org/10.31298/sl.141.1-2.3

27. **Mulahusić, A.**, Tuno, N., Topoljak, J., Balić, Dž. (2016). Izdelava 3D-modela kompleksnega kulturno zgodovinskega spomenika z uporabo digitalne fotogrametrične postaje. *Geodetski vestnik, 60* (1), 28-41. http://dx.doi.org/10.15292/geodetski-vestnik.2016.01.28-41

28. Tuno, N., **Mulahusić, A.**, Kogoj, D. (2015). Vrednotenje modelov transformacije geodetskih načrtov. *Geodetski vestnik, 59* (4), 736-751. http://dx.doi.org/10.15292/geodetski-vestnik.2015.04.736-751

29. Tuno, N., Topoljak, J., **Mulahusić, A.**, Kozličić, M. (2015). Cartographic depiction of religious buildings and cemeteries on cadastral maps created during the first cadastral survey of Bosnia and Herzegovina : Kartografski prikazi sakralnih

	objekata i groblja na katastarskim planovima stare izmjere Bosne i Hercegovine. *Geoadria, 20* (2), 175-214. https://dx.doi.org/10.15291/geoadria.7 30. **Mulahusić, A.**, Gajski, D., Tuno, N., Topoljak, J., Zec, E., Bojić, M. (2015). Primjena laserskog skeniranja pri analiziranju štete na vozilima nakon prometnih nesreća. *Geodetski list, 69 (92)* (2), 97-114. https://hrcak.srce.hr/142571 31. Tuno, N., **Mulahusić, A.**, Kogoj, D. (2012). Od Reg Elta do Spatial Station: Štiri desetletja elektronskih tahimetrov Zeiss (Trimble). *Geodetski vestnik, 56*(3), 415-426. http://dx.doi.org/10.15292/geodetski-vestnik.2012.03.415-426 32. Tuno, N., **Mulahusić, A.**, Marjetič, A., Kogoj, D. (2010). Pregled razvoja elektronskih tahimetrov Leica Geosystems. *Geodetski vestnik, 54*(4), 643-660. http://dx.doi.org/10.1529210.15292/geodetski-vestnik.2010.04.643-66 33. **Mulahusić, A.**, Podobnikar, T., Tuno, N. (2007). Topografski informacijski sistem Bosne in Hercegovine – konceptualni in logični model. *Geodetski vestnik, 51*(3), 537-548. http://wwwy.geodetski-vestnik.com/arhiv/51/3/gv51-3_537-548.pdf
Publications in journals indexed in other recognized scientific databases such as Scopus, EBSCO, and similar	1. **Mulahusić, A.**, Topoljak, J., Tuno, N., Đidelija, M., Kulo, N. (2024). Austro-Ugarski premjer travničkih medresa. Historijski pogledi, 12. 110-133. https://doi.org/10.52259/historijskipogledi.2024.7.12.110 2. Kregar, K., Topoljak, J., Đidelija, M., **Mulahusić, A.**, Kulo, N., Ambrožič, T. (2023). Measurement of the Bijambare Cave Using the Terrestrial Laser Scanning Method. *Geodetski glasnik*, *54*, 32-47. https://doi.org/10.58817/2233-1786.2023.57.54.32 3. **Mulahusić, A.**, Topoljak, J., Tuno, N., Đidelija, M., Kulo, N. (2023). Kartografski izvori prostornih podatka o starim gradovima Toričan i Vrbenac. *Historijski pogledi, 10*, 121-147. https://doi.org/10.52259/historijskipogledi.2023.6.10.121 4. Topoljak, J., **Mulahusić, A.**, Kljajić, I. (2022). Analogni katastarski planovi u funkciji interpretacije položaja vodenica Novotravničkih naselja Kasapovići i Isakovići. *Geodetski glasnik*, *53*, 62-84. http://doi.org/10.58817/2233-1786.2022.56.53.62 5. **Mulahusić, A.**, Topoljak, J., Tuno, N., Rebihić, N. (2022). Analiza prikaza grobalja naselja Lupac i Preočica u Vitezu na katastarskim planovima starog

i novog premjera. *Historijski pogledi,* *7*, 111-156. https://doi.org/10.52259/historijskipogledi.2022.5.7.111

6. Tuno, N., **Mulahusić, A.**, Topoljak, J. (2019). Influence of the Datum Definition on the Accuracy of Horizontal Geodetic Control Networks for Engineering Objects. *Journal of Civil Engineering and Construction* *8*(3), 99-106. https://doi.org/10.32732/jcec.2019.8.3.99

7. **Mulahusić, A.**, Topoljak, J., Tuno, N., Ademović, N., Vojniković, E. (2018). Analiza nivelmanske mreže vijadukta Koševo. e-Zbornik : *Elektronički zbornik radova Građevinskog fakulteta*, *15*, 40-49. https://hrcak.srce.hr/en/clanak/299946

8. Kapetanović, N., Topoljak, J., **Mulahusić, A.**, Selmani, R. (2015). Prilog ispitivanju mogućnosti korištenja instrumentarija različitih tehničkih izvedbi pri uspostavljanju nivelmanskih mreža posebnih namjena u inženjerskoj geodeziji. *Geodetski glasnik*, *46*, 7-17. http://doi.org/10.58817/2233-1786.2015.49.46.7

9. Tuno, N., **Mulahusić, A.** (2015). Generalna karta Bosne i Hercegovine razmjere 1:150 000. *Geodetski glasnik, 46*, 28-47. http://doi.org/10.58817/2233-1786.2015.49.46.28

10. Topoljak, J., Tuno, N., **Mulahusić, A.**, Husić, A., Fekeža-Martinović, L. (2015). Ostaci srednjevjekovne utvrde Kaštel (Fenarlik) u kartografskim izvorima XIX i XX vijeka. *Geodetski glasnik*, *46*, 55-74. https://doi.org/10.58817/2233-1786.2015.49.46.55

11. Hajdar, A., Kazija, S., **Mulahusić, A.**, Tomović, D. (2014). Google Maps API za izradu interaktivne karte sa ciljem utvrđivanja lokacije. *Geodetski glasnik*, *45*, 63-73. https://doi.org/10.58817/2233-1786.2014.48.45.63

12. **Mulahusić, A.**, Tuno, N., Topoljak, J., Balić, Dž., Hadžiosmanović, E., Stanić, S., Hajdar, A. (2013). Primjena fotogrametrije i laserskog skeniranja kod zaštite spomenika kulturno historijske baštine. *Geodetski glasnik*, *44*, 34-57. https://doi.org/10.58817/2233-1786.2013.47.44.34

13. Habibović, F., Topoljak, J., **Mulahusić, A.** (2012). Pristup uzurpacijama zemljišta na teritoriji Općine Maglaj. *Geodetski glasnik*, *43*, 39-49. https://doi.org/10.58817/2233-1786.2012.46.43.39

14. **Mulahusić, A.**, Tuno, N. (2012). Earth Observation activities for the environment in Bosnia and Herzegovina. *South-Eastern European Journal of Earth Observation and Geomatics, 1*(1), 37-43. http://ejournals.lib.auth.gr/seejeog/article/view/361

15. Topoljak, J., **Mulahusić, A.** (2011). Uzurpacija zemljišta. *Geodetski glasnik*, *41*, 33-41. https://doi.org/10.58817/2233-1786.2011.45.41.33

16. Tuno, N., **Mulahusić, A.**, Kozličić, M., Orešković, Z. (2011). Border Reconstruction of Bosnia and Herzegovina's Access to the Adriatic Sea at Sutorina by Consulting Old Maps: Rekonstrukcija granice sutorinskog izlaza Bosne i Hercegovine na Jadransko more s pomoću starih geografskih karata. *Kartografija i geoinformacije*, *16*, 26-55. https://hrcak.srce.hr/en/clanak/115778

17. **Mulahusić, A.**, Tuno, N. (2011). Metode za otkrivanje promjena kod daljinskih istraživanja. *Geodetski glasnik*, *40*, 3-13. https://doi.org/10.58817/2233-1786.2011.45.40.3

18. **Mulahusić, A.** (2007). Kreiranje tematskih karti na osnovu satelitskih snimaka korištenjem Maximum likelihood klasifikacije. *Geodetski glasnik*, *39*, 22-29. http://www.suggsbih.ba/GEODETSKI%20GLASNIK/GEODETSKI%20GLASNIK%2039/Mulahusic_GG39.pdf

Conference papers presented at reputable conferences, with published proceedings indexed in Scopus and the Web of Science Core Collection

1. Tuno, N., Topoljak, J., **Mulahusić, A.**, Đidelija, M., Kulo, N., Hamzić, A., Kogoj, D. (2024). Automated Image Matching: An Efficient Tool for Georeferencing Historical Cadastral Maps. In: Ademović, N., Akšamija, Z., Karabegović, A. (eds) Advanced Technologies, Systems, and Applications IX. IAT 2024. Lecture Notes in Networks and Systems, vol 1143. Springer, Cham. https://doi.org/10.1007/978-3-031-71694-2_27

2. Hamzić, A., Đidelija, M., Kulo, N., Tuno, N., Topoljak, J., **Mulahusić, A.** (2024). Analyzing Object Verticality: A Three-Segment Linear Regression Model. In: Ademović, N., Akšamija, Z., Karabegović, A. (eds) Advanced Technologies, Systems, and Applications IX. IAT 2024. Lecture Notes in Networks and Systems, vol 1143. Springer, Cham. https://doi.org/10.1007/978-3-031-71694-2_26

3. Tuno, N., **Mulahusić, A.,** Topoljak, J., Savić, M. (2024). Preservation of Cultural Heritage Architecture by 3D Printing and Realistic 3D Models. In: Karabegovic, I., Kovačević, A., Mandzuka, S. (eds) New Technologies, Development and Application VII. NT 2024. Lecture Notes in Networks and Systems, vol 1070. Springer, Cham. https://doi.org/10.1007/978-3-031-66271-3_69

4. Tuno, N., Topoljak, J., **Mulahusić, A.,** Đidelija, M., Kulo, N., Ambrožič, T. (2023). Geometric Enhancement of the Cadastre of Underground Utility Networks. In: Ademović, N., Kevrić, J., Akšamija, Z. (eds) Advanced

Technologies, Systems, and Applications VIII. IAT 2023. Lecture Notes in Networks and Systems, vol 644. Springer, Cham. https://doi.org/10.1007/978-3-031-43056-5_11

5. Tuno, N., **Mulahusić, A.**, Jugović, G., Kogoj, D. (2023). 3D Digital Reconstruction of Heritage Buildings by Using Old 2d Plans. In: Karabegovic, I., Kovačević, A., Mandzuka, S. (eds) New Technologies, Development and Application VI. NT 2023. Lecture Notes in Networks and Systems, vol 707. Springer, Cham. https://doi.org/10.1007/978-3-031-34721-4_32

6. **Mulahusić, A.**, Tuno, N., Topoljak, J., Ćatić, J. (2023). Comparison and Analysis of Two UAVs 3D Models of Medium and High Quality. In: Ademović, N., Mujčić, E., Mulić, M., Kevrić, J., Akšamija, Z. (eds) Advanced Technologies, Systems, and Applications VII. IAT 2022. Lecture Notes in Networks and Systems, vol 539. Springer, Cham. https://doi.org/10.1007/978-3-031-17697-5_41

7. **Mulahusić, A.**, Tuno, N., Topoljak, J., Gačanović, F. (2022). Integration of UAV and Terrestrial Photogrammetry for Cultural and Historical Heritage Recording and 3D Modelling: A Case Study of the 'Sebilj' Fountain in Sarajevo, Bosnia and Herzegovina. In: Karabegović, I., Kovačević, A., Mandžuka, S. (eds) New Technologies, Development and Application V. NT 2022. Lecture Notes in Networks and Systems, vol 472. Springer, Cham. https://doi.org/10.1007/978-3-031-05230-9_108

8. **Mulahusić, A.**, Tuno, N., Topoljak, J., Đidelija, M., Grabus, E. (2022). Simultaneous Use of Terrestrial Laser Scanning and Close-Range Photogrammetry for Documentation of Cultural and Historical Heritage Monuments. In: Ademović, N., Mujčić, E., Akšamija, Z., Kevrić, J., Avdaković, S., Volić, I. (eds) Advanced Technologies, Systems, and Applications VI. IAT 2021. Lecture Notes in Networks and Systems, vol 316. Springer, Cham. https://doi.org/10.1007/978-3-030-90055-7_39

9. **Mulahusić, A.**, Tuno N., Topoljak J., Đidelija M. (2021). Satellite Thermography of Cities and Possibilities of Influence on Temperature Reduction. In: Karabegović I. (eds), New Technologies, Development and Application IV. NT 2021. Lecture Notes in Networks and Systems, vol 233. Springer, Cham. https://doi.org/10.1007/978-3-030-75275-0_113

10. Ćatić J., **Mulahusić A.**, Tuno N., Topoljak J. (2020). Using the Semi-professional UAV System in Surveying the Medium Size Area of Complex Urban Surface. In: Karabegović I. (eds) New Technologies, Development and Application III. NT 2020. Lecture Notes in Networks and Systems, vol 128. Springer, Cham. https://doi.org/10.1007/978-3-030-46817-0_96

11. Tuno N., **Mulahusić A.**, Topoljak J., Kurtović, SY. (2020) Genetic Algorithms Applied to the Map Registration. In Avdaković S., Mujčić A., Mujezinović A.,

	Uzunović T., Volić I. (eds), Advanced Technologies, Systems, and Applications IV - Proceedings of the International Symposium on Innovative and Interdisciplinary Applications of Advanced Technologies (IAT 2019). Lecture Notes in Networks and Systems, vol 83. Springer, Cham. https://doi.org/10.1007/978-3-030-24986-1_46 12. **Mulahusić A.**, Tuno N., Topoljak J., Čengić F., Kurtović, SY. (2020). Collecting Geospatial Data Using Unmanned Aerial Photogrammetric System. In Avdaković S., Mujčić A., Mujezinović A., Uzunović T., Volić I. (eds), Advanced Technologies, Systems, and Applications IV -Proceedings of the International Symposium on Innovative and Interdisciplinary Applications of Advanced Technologies (IAT 2019). Lecture Notes in Networks and Systems, vol 83. Springer, Cham. https://doi.org/10.1007/978-3-030-24986-1_45 13. **Mulahusić, A.**, Topoljak, J., Tuno, N., Ajvazović, K. (2019). The Possibilities of the Cadastral Land Use Assessment by the Methods of Remote Sensing. In: Karabegović, I. (eds) New Technologies, Development and Application. NT 2018. Lecture Notes in Networks and Systems, vol 42. Springer, Cham. https://doi.org/10.1007/978-3-319-90893-9_53 14. Tuno, N., **Mulahusić, A.**, Topoljak, J., Mahmutagić, Dž., Kogoj, D. (2017). Improvement of the Geometric Foundation for Spatial Data Infrastructure. 17th International Multidisciplinary Scientific GeoConference SGEM 2017 Conference Proceedings 17(23) (pp. 565-572). Varna, Bugarska: SGEM. http://dx.doi.org/10.5593/sgem2017/23/S11.070 15. Vrce, E., Tuno, N., Omićević, Dž., Topoljak, J., **Mulahusić, A.** (2011). Horizontal displacements monitoring of construction site in urban area. 11th International Multidisciplinary Scientific GeoConference SGEM2011 Conference Proceedings Vol. 2 (pp. 263-270). Varna, Bugarska: SGEM. http://dx.doi.org/10.5593/SGEM2011/S07.109
Poster presentations at prominent conferences whose proceedings are indexed in citation databases	1. Bilajbegović, A., Vrce, E., Tuno, N., Mulić, M., **Mulahusić, A.**, Omićević, Dž. (2008). Local geodynamic velocities by GPS and 3D model of the terrain deformation in Tuzla. Poster prezentacija na EGU General Assembly 2008, Beč. Sažetak dostupan u Geophysical Research Abstracts, Vol. 10, EGU2008-A-11301 http://meetings.copernicus.org/www.cosis.net/abstracts/EGU2008/11301/EGU2008-A-11301.pdf 2. Bilajbegović, A., Vrce, E., Tuno, N., Mulić, M., **Mulahusić, A.**, Omićević, Dž. (2008). Study of terrain deformation examinations in the town Tuzla using geodetic methods. Poster prezentacija na EGU General Assembly 2008, Beč. Sažetak dostupan u Geophysical Research Abstracts, Vol. 10, EGU2008-A-11355 http://meetings.copernicus.org/www.cosis.net/abstracts/EGU2008/11355/EGU2008-A-11355-2.pdf

Other published	1. **Mulahusić, A.**, Topoljak, J., Tuno, N., Đidelija, M., Kulo, N. (2021). Bosanskohercegovački putni pravci na osmanskoj karti iz 19. stoljeća. U: E. Islamović (ur.), Bosna i Hercegovina kroz historiju – povodom 40 godina naučnog rada akademika Mithada Kozličića – zbornik radova (pp. 113-126). Bihać: Naučno društvo za razvoj društvenih i humanističkih nauka Bihać i naučno društvo pravnika Tuzla. 2. Gjorgjiev, V., Gospavić, Z., **Mulahusić, A.**, Kovačević, D., Obradović, Ž. (2018). Comparative analysis of real estate property appraisal and property transactions in FYROM, Republic of Serbia, Republic of Montenegro and Bosnia and Hercegovina. RELAND: International Journal of Real Estate & Land Planning, [S.l.], v. 1, p. 11-19, 2018. ISSN 2623-4807. http://ejournals.lib.auth.gr/reland/article/view/6451 3. **Mulahusić, A.**, Mulić, M., Tuno, N., Topoljak, J. (2016). Study of Geodesy at the Faculty of Civil Engineering – University of Sarajevo. U I. Aleksić (ur.), International Scientific Conference GEO2016: Professional Practice and Education in Geodesy and Geoinformatics - Proceedings (pp. 45-52). Kopaonik, Srbija: Univerzitet u Beogradu – Građevinski fakultet. 4. Mulić, M., **Mulahusić, A.**, Omićević, Dž., Vrce, E., Tuno, N., Bilajbegović, A. (2008). Study of the ground displacements in the town Tuzla using geodetic methods. 5th International Conference for Landmanagement, Geoinformation, Building Industry, Environment – INTERGEO EAST. Beograd: Republički geodetski zavod. 5. Ključanin, S., Tuno, N., **Mulahusić, A.** (2006). Visualisation of topographic database at the internet. 3th International Conference for Landmanagement, Geoinformation, Building Industry, Environment – INTERGEO EAST. Beograd: Republički geodetski zavod. https://www.researchgate.net/publication/348390193_Visualization_of_topographic_database_at_the_Internet 6. **Mulahusić, A.** (2003). Kamere u fotogrametriji. *Geodetski glasnik, 37*, 53-58. 7. **Mulahusić, A.**, Krmpotić, M. (2001). Kreiranje i izbor najpovoljnijeg digitalnog modela terena. *Geodetski glasnik, 35*, 12-21. 8. **Mulahusić, A.** (2000). Daljinska istraživanja. *Geodetski glasnik, 34*, 15-22.