

PERSONAL INFORMATION

Nedim Kulo



 Sarajevo, Bosna i Hercegovina

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 [Nedim Kulo - Google Scholar](#)
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Gender: Male | Date of Birth: August 19, 1992 | Nationality: Bosnia and Herzegovina

WORK EXPERIENCE

2018. – 2021.

Teaching Assistant

University of Sarajevo, Faculty of Civil Engineering, Patriotske Lige 30, 71000 Sarajevo
Assistant in the scientific field of "Geodesy and Geoinformatics"

Sector: Higher Education, Scientific Research and Professional Work

2021. - Present

Senior Teaching Assistant

University of Sarajevo, Faculty of Civil Engineering, Patriotske Lige 30, 71000 Sarajevo
Assistant in the scientific field of "Geodesy and Geoinformatics"

Sector: Higher Education, Scientific Research and Professional Work

EDUCATION AND TRAINING

2015. – 2017.

Master's studies in Geodesy at the Department of Geodesy, Faculty of Civil Engineering in Sarajevo.
Degree obtained: Master of Geodesy and Geoinformatics (equivalent to Dipl.-Ing.)
Thesis: Integration of Remote Sensing Data

2011. – 2015.

Bachelor's studies in Geodesy at the Department of Geodesy, Faculty of Civil Engineering in Sarajevo.
Degree obtained: Bachelor of Engineering in Geodesy

2007. – 2011.

Secondary School of Civil Engineering and Geodesy, Sarajevo
Title obtained: Geodetic Technician – Surveyor
Special Award by the Ministry of Education and Science of Sarajevo Canton

1999. – 2007.

First Primary School Ilidža (Prva osnovna škola Ilidža)

PERSONAL SKILLS

Mother tongue(s)

Bosnian

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C1	C1	C1	C1

Levels: A1/2: Basic user - B1/2: Independent user - C1/2 Proficient user

Communication skills

Strong communication skills acquired through teaching, collaboration on scientific and professional projects, and participation in student promotion events

Organisational / managerial skills

Experience in organizing and editing the journal Geodetski glasnik, supervising students' seminar work, and involvement in technical projects

Job-related skills Experienced in organizing and conducting lectures, and work on scientific and professional projects

Digital Competence

SELF-ASSESSMENT				
Information Processing	Communication	Content Creation	Safety	Problem Solving
Proficient	Proficient	Independent	Proficient	Independent

Levels: Basic user – Independent user – Proficient user

- Knowledge of specialized geodetic software such as ERDAS IMAGINE, TBC, Image Master for IS, Photo Modeler, PhotoScan, ArcGIS, Civil 3D, AutoCAD, etc.
- Strong proficiency with Microsoft Office suite

Other skills

Work with spatial databases
3D modeling
Interpretation and analysis of remote sensing data
Technical Editor of Geodetski glasnik, the journal of the Geodetic Association of Bosnia and Herzegovina (since 2019)

Driving licence

Category B

ADDITIONAL INFORMATION

Research projects

Geodezija u upravljanju obnovljivim izvorima energije - Geodesy in the Management of Renewable Energy Sources (2024-2025)

National research project funded by the Federal Ministry of Education and Science. Role: project collaborator.

Bespilotno multispektralno snimanje iz zraka u funkciji očuvanja poljoprivrede Federacije Bosne i Hercegovine - Aerial Multispectral Drone Surveying for Agricultural Conservation in the Federation of BiH (2024-2025)

National research project funded by the Federal Ministry of Education and Science. Role: project collaborator.

Geoprostorne tehnologije u funkciji očuvanja materijalne kulturno-historijske baštine Kantona Sarajevo - Geospatial Technologies in the Preservation of Cultural and Historical Heritage of Sarajevo Canton (2024 – ongoing)

Research project of special significance for Sarajevo Canton funded by the Ministry of Science, Higher Education and Youth. Role: project collaborator

Zaštita okoliša primjenom radarske interferometrije - Environmental Protection Using Radar Interferometry (2024 – ongoing)

National research project funded by the Federal Ministry of Education and Science and UNDP. Role: project collaborator.

Uloga georadarske tehnologije u poboljšanju kvaliteta života u urbanim sredinama: slučaj Kanton Sarajevo - The Role of GPR Technology in Improving Quality of Life in Urban Areas: Case of Sarajevo Canton (2023 – 2024)

Research project of special significance for Sarajevo Canton funded by the Ministry of Education, Science and Youth. Role: project collaborator.

Metoda evaluiranja geometrijske tačnosti rekonstrukcije objekata graditeljskog naslijeđa zasnovana na terestričkom geoprostornom pozicioniranju - Evaluation Method of Geometric Accuracy in Cultural Heritage Reconstruction Based on Terrestrial Geospatial Positioning (2023 – 2024)

National research project funded by the Federal Ministry of Education and Science. Role: project collaborator.

Nova metoda digitalne transformacije podataka kulturno-historijskog naslijeđa - A New Method for Digital Transformation of Cultural and Historical Heritage Data (2022 – 2023)

National research project funded by the Federal Ministry of Education and Science. Role: project collaborator.

Primjena terestričkog laserskog skeniranja u podzemnim špiljama, tunelima i rudnicima - Application of Terrestrial Laser Scanning in Caves, Tunnels, and Mines (2021 – 2023)

Bilateral research project within scientific and technological cooperation between Slovenia and BiH, funded by the Federal Ministry of Education and Science and the Ministry of Education, Science and Sport of the Republic of Slovenia. Role: project collaborator.

Unapređenje sistema upravljanja geoprostornim podacima katastra komunalne infrastrukture primjenom georadara - Improvement of Utility Infrastructure Cadastre Geospatial Data Management Using GPR (2020 – 2022)

Research project of special significance for Sarajevo Canton funded by the Ministry of Education, Science and Youth. Role: project collaborator..

Primjena satelitskih snimaka u nadziranju poljoprivredne suše - Use of Satellite Imagery for Monitoring Agricultural Drought (2019 – 2022)

Bilateral research project (Slovenia–BiH) funded by the Federal Ministry of Education and Science and the Slovenian Ministry of Education, Science and Sport. Role: project collaborator.

Primjena savremenih metoda daljinskih istraživanja u funkciji nadzora postojećih i otkrivanja novih odlagališta otpada na području Kantona Sarajevo - Application of Modern Remote Sensing Methods for Monitoring and Identifying Illegal Waste Disposal Sites in Sarajevo Canton (2020 – 2021)

Research project funded by the Ministry of Education, Science and Youth of Sarajevo Canton. Role: project collaborator.

Izrada toplotnih profila grada Sarajeva u svrhu identifikacije objekata zbog povećanja njihove energetske efikasnosti - Creation of Thermal Profiles in Sarajevo for Improving Energy Efficiency (2019 – 2021)

Research project funded by the Ministry of Education, Science and Youth of Sarajevo Canton. Role: project collaborator.

Technical Projects

Geotechnical characteristics report and main remediation design for Curine Njive landslide with monitoring (2025)

GPR survey to detect sewer pipes near the Kobilja Glava tunnel (2025)

Review of sediment measurement study for the Hydroelectric Plant Branch on the Neretva, Jablanica (2025)

Review of the hydraulic analysis study for the old Neretva riverbed (2025)

Geodetic survey of the bridge over Kasindolska River (2024)

Repeat verticality check of the chimney at the University Clinical Center Sarajevo (2024)

GPR scanning of column foundations in the "DM Dialogicum" building, Ilidža (2023)

Verticality testing of reflector tower structures at Sarajevo Airport (2023)

Survey of roof beams in KSC Ilidža to measure deflection (2023)

Geodetic observation of overpass details at Arcelor Mittal complex in Zenica (2023)

Minaret verticality testing of Bjelave Mosque (2022)

Chimney verticality check at the UCC Sarajevo boiler room (2021)

Survey and horizontal check of beams in Bašigovci Primary School, Živinice (2021)

Bridge survey and preparation of geodetic layout in Vareš (2021)

Survey of excavation for electrical installation needs (2020)

Geodetic documentation of crane rails at the Institute for Materials and Structures (2020)

Professional associations membership

Savez udruženja građana geodetske struke u Bosni i Hercegovini (Geodetic Association of Bosnia and Herzegovina)

Honours and awards

Special Recognition from the Ministry of Education and Science of Sarajevo Canton (2011)

1st place at the 3rd Festival of Technical and Vocational Schools of BiH in the category "Geodetic Technician" (2011)

BIBLIOGRAPHY

Articles, publications, conference papers

- 'Inclination Assessment of Objects with Circular Base Using Algebraic Circle Fitting, Linear Regression, and Bootstrapping', Journal of Surveying Engineering, 151(3), 05025001, 2025. <https://doi.org/10.1061/JSUED2.SUENG-1564> - koautor
- '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, 2025. <https://doi.org/10.3390/geomatics5010008> - koautor
- 'Analyzing Depth Uncertainty of Near-Shore Bathymetric Survey Conducted by Single-Beam Echo Sounder'. Tehnički Glasnik, 18(Special Issue), 84–91. 2024. <https://doi.org/10.31803/tg-20241008141610>
- 'Austro-Ugarski premjer travničkih medresa', Historijski Pogledi, 7(12), 110–133, 2024.

- <https://doi.org/10.52259/historijskipogledi.2024.7.12.110> - koautor
- 'Automated Image Matching: An Efficient Tool for Georeferencing Historical Cadastral Maps' u 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 - koautor
 - 'Analyzing Object Verticality: A Three-Segment Linear Regression Model' u 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 - koautor
 - 'Snimanje pećine Bijambare metodom terestričkog laserskog skeniranja', Geodetski glasnik, 54, 32–47, Sarajevo, BiH, 2023. <https://doi.org/10.58817/2233-1786.2023.57.54.32> - koautor
 - 'Kartografski izvori prostornih podataka o starim gradovima Toričan i Vrbenac', Historijski pogledi 6(10), 121–147, 2023. <https://doi.org/10.52259/historijskipogledi.2023.6.10.121> - koautor
 - '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(11), 1338, 2023. <https://doi.org/10.1007/s10661-023-11930-2> - koautor
 - 'Geometric Enhancement of the Cadastre of Underground Utility Networks' u 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 - koautor
 - 'Primjena mašinskog učenja na GNSS podatke prikupljene pametnim telefonom', Geodetski glasnik, 53, 5–23, Sarajevo, BiH, 2022. <https://doi.org/10.58817/2233-1786.2022.56.53.5>
 - 'Effects of Kalman Filter in Pedestrian Navigation by Smartphone' u 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_44
 - 'Segmentation scale parameter influence on the accuracy of detecting illegal landfills on satellite imagery. A case study for Novo Sarajevo', Ecological Informatics, 70, 101755, 2022, <https://doi.org/10.1016/j.ecoinf.2022.101755> – koautor.
 - 'Srednjovjekovne tvrđave prikazane na analognim katastarskim planovima stare i nove izmjere Bosne i Hercegovine', Geodetski list, 75 (98)(4), 345–364, Zagreb, 2021. – koautor
 - 'Testiranje različitih vrijednosti parametra razmjere segmentacije u funkciji otkrivanja nelegalnih odlagališta otpada', Geodetski glasnik, 52, 74–86, Sarajevo, BiH, 2021. <https://doi.org/10.58817/2233-1786.2021.55.52.74>
 - 'Višesenzorsko povezivanje podataka daljinskih istraživanja', Geodetski Glasnik, 50, 71–94, Sarajevo, BiH, 2019. <https://doi.org/10.58817/2233-1786.2019.53.50.71>
 - 'Benefits of the Remote Sensing Data Integration', 1st Western Balkan Conference on GIS, Mine Surveying, Geodesy and Geomatics, Tirana, Albania, 2018.
 - 'Različiti načini integracije podataka daljinskih istraživanja', Geodetski glasnik, 49, 55–76, Sarajevo, BiH, 2018. <https://doi.org/10.58817/2233-1786.2018.52.49.55>

SORT BIOGRAPHY

Born on August 19, 1992, in Sarajevo, Bosnia and Herzegovina. Completed primary and secondary education in Sarajevo. Graduated from the Faculty of Civil Engineering (Geodesy Department) in 2015 with a Bachelor of Geodesy. Completed Master's studies at the same faculty in 2017 and obtained the title of Master of Geodesy and Geoinformatics. Worked as a teaching assistant at the Department of Geodesy and Geoinformatics (2018–2021). Employed as Senior Assistant at the same department since December 2021.