

Muamer Didelija

Date of birth: 12/04/1995 | **Statemanship:** Bosnian-Herzegovinian | **Phone number:**

(+387) 62436382 (Mobile) Phone number: (+387) 33278459 (Office) E-mail:

muamer.diideliia@qf.unsa.ba | LinkedIn: https://www.linkedin.com/in/muamer-dideliia-735037163/ | ResearchGate:

https://www.researchgate.net/profile/Muamer-Didelija | ORCID: https://orcid.org/0000-0002-5667-8131 Google

https://www.webofscience.com/wos/author/record/GQH-6475-2022 Scopus:

https://www.scopus.com/authid/detail.uri?authorId=57236019400

Address: Patriotske lige 30, 71000, Sarajevo, Bosnia and Herzegovina (Official)

WORK EXPERIENCE

III UNIVERSITY OF SARAJEVO - FACULTY OF CIVIL ENGINEERING - SARAJEVO, BOSNIA AND HERZEGOVINA

Web http://www.gf.unsa.ba/

SENIOR ASSISTANT – 27/10/2022 – now

III UNIVERSITY OF SARAJEVO - FACULTY OF CIVIL ENGINEERING - SARAJEVO, BOSNIA AND HERZEGOVINA

Web http://www.qf.unsa.ba/

ASSISTANT - 31/12/2018 - 27/10/2022

EDUCATION

2019 - 2025 Sarajevo, Bosnia and Herzegovina

PhD IN GEODESY AND GEOINFORMATICS University of Sarajevo – Faculty of Civil Engineering

2016 - 2018 Sarajevo, Bosnia and Herzegovina

MASTER OF GEODESY AND GEOINFORMATICS University of Sarajevo – Faculty of Civil Engineering

2013 - 2016 Sarajevo, Bosnia and Herzegovina

BACHELOR OF GEODESY AND GEOINFORMATICS University of Sarajevo – Faculty of Civil Engineering

2009 - 2013 Mostar, Bosnia and Herzegovina

TECHNICIAN OF GEODESY Civil Engineering High School of Mostar

LANGUAGE

Native language: **BOSNIAN**

Other languages:

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interakcija	
ENGLISH	B2	B2	B2	B2	B2

DRIVING LICENSE

Driving license: B1

Driving license: B

PUBLICATIONS

2025

Modern Methods for Maintaining Cadastral Records: An Overview

Conference paper

Journal: IAT 2025: Advanced Technologies, Systems, and Applications X | **Issue, pages**: pp. 311-326

2025

Remote Sensing Applications for Analyzing Air Quality in Sarajevo's Lower Atmosphere

Conference paper

Journal: IAT 2025: Advanced Technologies, Systems, and Applications X | Issue, pages: pp. 234-247

2025

<u>Squared Msplit Estimation in Deformation Analysis - 2D Geodetic Network Case Study</u>

Scientific article

Journal: Geodetski vestnik | **Issue, pages**: 69(2), pp. 115-147

2025

GPR Measurements for Utility Detection

Conference paper

Journal: New Technologies, Development and Application VIII | Issue, pages: pp. 419-424

2025

<u>Assessment of Minaret Inclination and Structural Capacity Using Terrestrial Laser Scanning and 3D Numerical Modeling: A Case Study of the Bjelave Mosque</u>

Review article, https://doi.org/10.3390/geomatics5010008

Journal: Geomatics | **Issue**, **pages**: 5(1), 8

2025

Inclination Assessment of Objects with Circular Base Using Algebraic Circle Fitting, Linear Regression, and Bootstrapping

Review article, https://doi.org/10.1061/JSUED2.SUENG-1564

Journal: Journal of Surveying Engineering | **Issue, pages**: 151(3), 05025001

2024

Analyzing Object Verticality: A Three-Segment Linear Regression Model

Conference paper, https://doi.org/10.1007/978-3-031-71694-2 26

Journal: IAT 2024: Advanced Technologies, Systems, and Applications IX | Issue, pages: pp. 347–359

2024

Automated Image Matching: An Efficient Tool for Georeferencing Historical Cadastral Maps

Conference paper, https://doi.org/10.1007/978-3-031-71694-2_27

Journal: IAT 2024: Advanced Technologies, Systems, and Applications IX | Issue, pages: pp. 360–369

2024

<u>Analyzing Depth Uncertainty of Near-Shore Bathymetric Survey Conducted by Single-Beam Echo</u> Sounder Review paper, https://doi.org/10.31803/tg- 20241008141610

Journal: Tehnički glasnik | **Issue, pages**: 18 (si1), pp. 84-91

2024

Austro-Ugarski premjer travničkih medresa

Review paper, https://doi.org/10.52259/historijskipogledi.2024.7.12.110

Journal: Historijski pogledi | Issue, pages: 12, pp. 110-133

2023

<u>Correlation analysis of different optical remote sensing indices for drought monitoring: a case study</u> of Canton Sarajevo, Bosnia and Herzegovina

Scientific article, https://doi.org/10.1007/s10661-023-11930-2

Journal: Environmental Monitoring and Assessment | **Issue, pages**: (2023) 195:1338

2023

Use of UAV for object deformation detection

Conference paper, https://doi.org/10.1007/978-3-031-43056-5_9

Journal: IAT 2023: Advanced Technologies, Systems, and Applications VIII | Issue, pages: pp. 105-114

2023

Geometric enhancement of the cadastre of underground utility networks

Conference paper, https://doi.org/10.1007/978-3-031-43056-5_11

Journal: IAT 2023: Advanced Technologies, Systems, and Applications VIII | Issue, pages: pp. 132-142

2023

Kartografski izvori prostornih podataka o starim gradovima Toričan i Vrbenac

Scientific article, https://doi.org/10.52259/historijskipogledi.2023.6.10.121

Journal: Historijski pogledi | **Issue, pages**: 10(6), pp. 121-147

2023

Snimanje pećine Bijambare metodom terestričkog laserskog skeniranja

Review article, https://doi.org/10.58817/2233-1786.2023.57.54.32

Journal: Geodetski glasnik | **Issue, pages**: 54, pp. 32-47

2022

Evaluation of handheld scanner for digitization of cartographic heritage

Scientific article, https://doi.org/10.1016/j.culher.2022.01.008

Journal: Journal of Cultural Heritage | **Issue, pages**: 54 (2022), pp. 31-43

2022

Impact of Rover Pole Holding on the Positioning Accuracy of RTK-GNSS

Case study, https://doi.org/10.1061/(ASCE)SU.1943-5428.0000404

Journal: Journal of Surveying Engineering | **Issue**, **pages**: 148(4), 05022003-1

2022

<u>Segmentation Scale Parameter Influence on the Accuracy of Detecting Illegal Landfills on Satellite Imagery. A case study for Novo Sarajevo.</u>

Review article, https://doi.org/10.1016/j.ecoinf.2022.101755

Journal: Ecological Informatics | Issue, pages: Vol. 70, 101755

Kalman filtering in the car navigation using mobile application GPSLogger

Conference paper, https://doi.org/10.1007/978-3-031-17697-5_43

Journal: IAT 2022: Advanced Technologies, Systems, and Applications VII | Issue, pages: pp. 567-580

2022

Quality Evaluation of 3D Heritage Monument Models Derived from Images Obtained with Different Low-Cost Unmanned Aerial Vehicles

Review article, https://hrcak.srce.hr/clanak/398771

Journal: Geodetski list | **Issue, pages**: 76 (99), No. 1, pp, 7-23

2021

Satellite Thermography of Cities and Possibilities of Influence on Temperature Reduction

Conference paper, https://doi.org/10.1007/978-3-030-75275-0_113

Journal: New Technologies, Development and Application IV | **Issue**, pages: pp. 1027-1035

2021

Bosanskohercegovački samostani, manastiri i medrese na analognim planovima stare i nove izmjere

Review paper, https://hrcak.srce.hr/file/379908

Journal: Geodetski list | **Issue, pages**: 75(98), pp. 117-142

2021

<u>Simultaneous use of terrestrial laser scanning and close-range photogrammetry for documentation of cultural and historical heritage monuments</u>

Conference paper, https://doi.org/10.1007/978-3-030-90055-7_39

Journal: IAT 2021: Advanced Technologies, Systems, and Applications VI | Issue, pages: pp. 502-513

2021

<u>Testiranje različitih vrijednosti parametra razmjere segmentacije u funkciji otkrivanja nelegalnih odlagališta otpada</u>

Review paper, https://doi.org/10.58817/2233-1786.2021.55.52.74

Journal: Geodetski glasnik | **Issue, pages**: 52, pp. 74-86

2021

Bosanskohercegovački putni pravci na osmanskoj karti iz 19. stoljeća

Part of the book, https://books.google.ba/books/about/Bosna_i_Hercegovina_kroz_historiju.html?id=GpV8zwEACAAJ&redir_esc=y

Book: "Bosna i Hercegovina kroz historiju" povodom 40 godina naučnog rada Mithada Kozličića | Issue, pages: pp. 113-127

2019

Regresiona analiza u funkciji ispitivanja geometrijskih parametara objekata visokogradnje

Review paper, https://doi.org/10.58817/2233-1786.2019.53.50.45

Journal: Geodetski glasnik | **Issue, pages**: 50, pp. 45-70

2018

Geodetski radovi pri izgradnji stuba vijadukta "Briješće"

Professional article, https://doi.org/10.58817/2233-1786.2018.52.49.77

Journal: Geodetski glasnik | Issue, pages: 49, pp. 77-91

REVIEWS

2022

H. Abdu and M. H. Mohd Noor: A Survey on Waste Detection and Classification Using Deep Learning

IEEE Access, 10, pp. 128151-128165

Link https://doi.org/10.1109/ACCESS.2022.3226682

RESEARCH PROJECTS

2025 - 2029

Geoconnect: Connecting Geospatial Expertise for Responsible and Transparent Governance

International research project funded by the Netherlands Enterprise Agency. The project coordinator in Bosnia and Herzegovina was the Federal Administration for Geodetic and Real Property Affairs.

Role: Project collaborator.

2025 - 2029

OLIVE – EduTech: An Interdisciplinary Approach to Monitoring the Physiological Response of Olive Trees to Different Pruning Intensities, with Knowledge Development and Skills Transfer to

Stakeholders

International research project conducted in the Republic of Croatia and funded by the European Union.

Role: Project collaborator.

2024 - 2025

Geodesy in Renewable Energy Management

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

Role: Project collaborator.

2024 - 2025

Unmanned Multispectral Aerial Imaging for the Preservation of Agriculture in the Federation of Bosnia and Herzegovina

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

Role: Project collaborator.

2024 - now

Geospatial Technologies for the Preservation of Tangible Cultural and Historical Heritage of the Sarajevo Canton

Research project of special importance for the Sarajevo Canton, funded by the Ministry of Science, Higher Education and Youth of the Sarajevo Canton.

Role: Project collaborator.

2024 - now

Environmental Protection through the Application of Radar Interferometry

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

Role: Project collaborator.

2024 – now

Sit Tibi Terra Levis: Formulae and Phrases from Funerary Monuments of Ancient Liburnia and Japodia - SSTL

International research project funded by the Croatian Science Foundation.

Role: Project collaborator.

2023 - 2024

The Role of Ground Penetrating Radar Technology in Improving the Quality of Life in Urban Areas: The Case of Sarajevo Canton

Research project of special importance for the Sarajevo Canton, funded by the Ministry of Education, Science and Youth of the Sarajevo Canton.

Role: Project collaborator.

2023 - 2024

Method for Evaluating the Geometric Accuracy of Cultural Heritage Object Reconstruction Based on Terrestrial Geospatial Positioning

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

Role: Project collaborator.

2022 - 2023

A New Method for the Digital Transformation of Cultural and Historical Heritage Data.

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

Role: Project collaborator.

2021 - 2023

Application of Terrestrial Laser Scanning in Underground Caves, Tunnels, and Mines

Bilateral research project under the 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.

2020 - 2022

Improvement of the Geospatial Data Management System of the Utility Cadastre through the Application of Ground Penetrating Radar

Research project of special importance for the Sarajevo Canton, funded by the Ministry of Education, Science and Youth of the Sarajevo Canton.

Role: Project collaborator.

2019 - 2022

Primjena Application of Satellite Imagery in Monitoring Agricultural Drought

Bilateral research project within the 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.

Role: Project collaborator.

2020 - 2021

Application of Modern Remote Sensing Methods for Monitoring and Detecting Illegal Waste Disposal Sites in the Sarajevo Canton

Research project of special importance for the Sarajevo Canton, funded by the Ministry of Education, Science and Youth of the Sarajevo Canton.

Role: Project collaborator.

2019 - 2021

Thermal Profiling of the City of Sarajevo for the Identification of Buildings with Low Energy Efficiency

Research project of special importance for the Sarajevo Canton, funded by the Ministry of Education, Science and Youth of the Sarajevo Canton.

Role: Project collaborator.

PROFESSIONAL PROJECTS

Geodetic Survey of the Smoke Duct of the ArcelorMittal Steelworks Agglomeration in Zenica

2025

Ground Penetrating Radar (GPR) Survey for the Detection of Sewer Pipes at the Site Above the Kobilja

Glava Tunnel

2025

Revision of the Sediment Measurement Report for the Hydroelectric Branch on the Neretva River,

Jablanica

2025

Revision of the Hydraulic Analysis Study for the Old Neretva Riverbed for the Hydroelectric Branch on the Neretva River, Jablanica

2024

Geodetic Survey of the Bridge over the Kasindolska River

2024

Repeated Verticality Control of the Chimney at the Boiler Plant of the University Clinical

Center in Saraievo

2024

GPR Survey of Foundation Pillars in the "DM Dialogicum" Building, Ilidža

2023

Verticality Testing of Lattice Light Tower Columns at Sarajevo International Airport

2023

Geodetic Survey of Roof Beams in the Ilidža Sports and Cultural Center for Deflection

Testing

2023

Geodetic Observation of the Overpass Structure within the ArcelorMittal Complex in Zenica

2022

Verticality Testing of the Minaret of the Bjelave Mosque

2021

Verticality Testing of the Chimney at the Boiler Plant of the University Clinical Center in Sarajevo

2021

Geodetic Observation and Verification of Beam Horizontal Alignment in the Sports Hall of Bašigovci Primary School, Živinice – Structural Condition Report Preparation

2021

Geodetic Observation and Preparation of a Survey Map of the Bridge in Vareš

2020

Geodetic Survey of Excavations Prior to Laying Electrical Installations for the Department of Geology, Faculty of Civil Engineering, University of Sarajevo

2020

Preparation of a Geodetic Survey Report on Crane Rails at the Institute for Materials and Structures, Faculty of Civil Engineering, University of Sarajevo

MEMBERSHIP

09/2019 - now

Secretary of the "Savez udruženja građana geodetske struke u BiH"

09/2019 - now

Secretary of the "Geodetski glasnik"

Secretary of the Bosnia and Herzegovina National Committee at IUGG

AWARDS

2023

University of Sarajevo Award for Scientific Research Excellence for 2022 – University of Sarajevo

2018

Dean's Award for Master's Student of the Generation – Department of Geodesy and Geoinformatics, Faculty of Civil Engineering, University of Sarajevo

2016

Dean's Award for Bachelor's Student of the Generation – Department of Geodesy and Geoinformatics, Faculty of Civil Engineering, University of Sarajevo

2013

High School Valedictorian - Secondary School of Civil Engineering Mostar, Geodesy Program

CERTIFIKATI

2021

Participation in Curriculum Development

Certificate of active participation in the development of the curriculum for the Secondary School of Civil Engineering in Mostar, Department of Geodesy and Geoinformatics.

2019

TRAIN - Lifelong Learning Program

Program on pedagogical education and competence strengthening for academic staff at the University of Sarajevo.

2018

English Language Course

Certificate of completion of an English language course – B2 Level, Cultural Center Mostar.