

Lazar Jeftic, BEng, MEng



Personal website: <https://sites.google.com/view/rse-environment/home>

E-mail: jefticlr@gmail.com

LinkedIn: <https://www.linkedin.com/in/lazar-jeftic-rse86de/>

ResearchGate: <https://www.researchgate.net/profile/Lazar-Jeftic>

EDUCATION:

Faculty of Technical Sciences, University of Novi Sad, Serbia

- Master Degree in Environmental Engineering, (2009. -2010.)
- Bachelor Degree in Environmental Engineering (2005. - 2009.)
- Diploma for best student on the promotion of Environmental Engineering students
16.04.2011.

CERTIFICATES AND AWARDS:

- Certificate of Award for UNITYSat mission - UNISEC India
- Special Commemoration Stamp for UNITYSat Satellite Team Member – India Post 2021
- Certificate of completion Wageningen University & Research - Serbian training on the use of the C3S Climate Data Store
- Certificate of completion NASA ARSET - Forest Mapping and Monitoring with SAR Data
- Certificate of completion NASA ARSET - Understanding Phenology with Remote Sensing
- Certificate of completion NASA ARSET - Remote Sensing of Coastal Ecosystems
- Certificate of completion NASA ARSET - Mapping and Monitoring Lakes and Reservoirs with Satellite Observations
- Graduate Certificate - Introduction to Rocket and Satellite Engineering, All-Russian Science Festival - International Online Certificate Program, April 12-17, 2020

PROJECTS:

- Project in the field of process and power systems and plants. The thesis of the project was “*Industrial trigeneration using ammonia-water absorption refrigeration systems (AAR)*”. The key task of the project was to model and simulate plant operation in computer program Cycle Tempo. Obtained grade 10 (ten).
- Application of GNSS-R for wetlands mapping using the Android phone device and u-blox GNSS module <https://gpscat.ca/2022/09/10/application-of-gnss-r-for-wetlands-mapping-using-the-android-phone-device-and-u-blox-gnss-module/>

Android application projects: GitHub Profile: <https://github.com/jefticRSe86>

- *Vegetation index calculator* (calculate BNDVI and GNDVI vegetation index from NGB camera).
- *Gaussian Plume*. Atmospheric dispersion calculator. <https://play.google.com/store/apps/details?id=gaussian.plume.calc>
- *Flood Structure*. Application for rapid structural vulnerability assessment to floods. Calculate degree of object vulnerability to flood event with six indicators (walls, foundations, height of the first floor, floors, doors, windows).
- *Automatic Remote Sensing System*. Using an Android mobile phone to automatically catch images at predefined interval on remote locations and send it via email to the user for inspection.
- *Satellite Monitor*. Application for satellite pass prediction based on available open source code.
- *GNSS-R Logger*. Testing the GNSS Reflectometry for wetlands monitoring.

PUBLICATIONS:

- Radosavljević D., Jeftić L., Muralikrishna Reddy L.V., Gopalakrishnan K., Mohankumar S. (2021), *Era of Small Satellites: Pico, Nano and Micro-satellites (PNM Sat)—an Over View of Frugal Way to Access Low Earth Orbit*, Springer Nature Singapore Pte Ltd. 2021. https://doi.org/10.1007/978-981-33-4687-1_35
- Ivan Plaščak, Mladen Jurišić, Ante Šiljeg, Lazar Jeftić, Domagoj Zimmer, Željko Barač, *Remote detection of ragweed (ambrosia artemisiifolia l.)*, Tehnički glasnik, Vol. 12 No. 4, 2018. <https://doi.org/10.31803/tg-20180320130635>
- Lazar Jeftic, Solomon Appekey, Selorm Appekey, *Observing the Earth from Low-Earth Orbit Using Modified Commercial Off-the-Shelf Digital Cameras*, 1st Ghana CanSat/Rocketry Championship GCRC ▪ Aug 1, 2022. https://www.researchgate.net/publication/362395295_Observing_the_Earth_from_Low-Earth_Orbit_Using_Modified_Commercial_Off-the-Shelf_Digital_Cameras
- Solomon Appekey, Lazar Jeftic, *VULNERABILITY ASSESSMENT FOR THE NEAR-EARTH OBJECT IMPACT SCENARIO*, 8th IAA Planetary Defense Conference 3-7 April 2023, Vienna, Austria, Apr 5, 2023. <https://atpi.eventsair.com/QuickEventWebsitePortal/23a01---8thplanetary-defense-conference/programme-website/Agenda/AgendaItemDetail?id=3c10ebfd-b27e-4f94-b561-85e7211c27ac>
- Solomon Appekey, Lazar Jeftic, *Deforestation in Krokosua Forest Reserve*, Xavier Space Solutions, Accra, Ghana, April 2023. https://www.researchgate.net/publication/370602678_Deforestation_in_Krokosua_Forest_Reserve

EXPERIENCE:

- *Independent R&D Engineer*. RSE Develop Environment. Remote sensing of crops, forest health protection and natural and man-made disasters using satellite (optical, SAR and LiDAR) and UAV data. Space remote sensing systems and small spacecraft technology. Orbital debris observations. Development of CIR color infrared, vegetation stress and UV cameras. Android application development in environmental engineering, disaster risk reduction and Android GNSS Reflectometry. Disaster risk reduction and vulnerability assessment. <https://sites.google.com/view/rse-environment/home>
- *Xavier Space Solutions Ghana*. Remote sensing and disaster risk reduction associate. CubeSat satellite mission payload for detection of TLEs (Transient Luminous Event) with small UV or light sensor. <https://xavierspacesolutions.com/index.html>
- *Vojvodjanska privredna avijacija – Ciklonizacija Logistika Novi Sad*. Remote sensing of forest, and invasive plant species (*Ambrosia artemisiifolia*). Remote sensing in forest health protection (monitoring various insect defoliator outbreaks and spruce bark beetle zones, forest fires, drying of trees and forest logging. Determination of flood prone zones using SAR, optical and LiDAR data. LiDAR application in forestry for timber and biomass assessment. Research in wetland mapping with GNSS-R.
- *CSPD Committee for Space Programme Development - Novi Sad*. Research and development of remote sensing technology, spacecraft vibration isolation and satellite tracking aids. Remote sensing of objects in Low Earth Orbit. Two space missions: UNITYSat [JITSat, GHRCEsat, Sri Shakthi Sat] and FEES (Flexible Experimental Embedded Satellite). Developed prototype of 1U Cubesat UNITY deployer with wire rope vibration isolators, viscoelastic multilayered stiffener for vibration attenuation and nichrome burn wire door release mechanism.
- *NELE D.O.O. Futog*. Wire Rope Isolators production for protection of mechanical and electrical systems from vibration and shocks impact. <https://neledoo.rs/WireRopeIsolators.html>

COMPUTER SKILLS

- Operating systems (Win XP, 7, 10), (Linux Ubuntu all supported versions), Microsoft Office (Word, Excel, PowerPoint, Access); Libre Office, Open Office;
- Android Studio, Eclipse Juno, Eclipse Luna, Arduino IDE - LoRa;
- QCAD, FreeCAD, OpenSCAD, Cycle Tempo, SuperPro Designer 6.0, ALOHA 5.4.1.2, FUSION LiDAR, REGDISP, R studio;
- Erdas Imagine 9.0, Opticks 4.10.0, Sentinel 1 and 2 toolbox, QGIS, ESA SNAP toolbox,
- LEOWorks, Agisoft PhotoScan Professional, Mission Planner, JsatTrak;
- Inkscape, Kompozer 0.8b3, Audacity, VideoPad Editor, VSDC Free Video Editor, BlueGriffon;

HOBBIES:

- running (half-marathons, relay races, short races),
- audio-video special effects (special effects techniques from the first three Star Wars movies),
- writing poems,
- collecting LP records