## Curriculum vitae

## PERSONAL INFORMATION

# Dipl.-Ing Nikola Janković



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- http://njankovic.com
- Linkedin linkedin.com/in/jankovicgd

GitHub github.com/jankovicgd

Gender Male | Date of birth 27 June 1992 | Nationality Serbian

### WORK EXPERIENCE

## 01.02.2021 - current Geospatial IT Engineer

EOX IT Services GmbH

Thurngasse 8/4, Vienna (Austria)

- PRISM View Server Copernicus Contributing Missions access Support Functions and Plat-
- EOEPCA EO Exploitation Platform Common Architecture (EOEPCA)
- Data science and Machine learning pipelines

Business or sector Software and IT

## 02.07.2018 – 31.01.2021 Software developer & Geoinformation scientist

Earth Observation Data Center (EODC) Franz-Grill-Straße, Vienna (Austria)

- Austrian Data Cube Bringing big data satellite imagery to the Earth Observation Comunity in Austria with OGC services (Geoserver) and python (OpenDataCube)
- Openeo An API for standardizing big data satellite imagery processing
- BMON System for soil moisture monitoring

Business or sector Education and Research / IT

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Technical University Vienna

Gusshausstrasse 29-27, Vienna (Austria)

Administration, research, and education. Teaching courses Implementation of a GIS, Geometrical algorithms in GIS, Geoinformation 1, Realisation of a GIS.

Researching Quality of life, Machine Learning, Geoinformatics and GIS.

Business or sector Education and Research

## 06.2016 - 09.2016 Guest Researcher

Technical University Vienna

Gusshausstrasse 29-27, Vienna (Austria)

Research and writing of master thesis regarding spatial standards ISO 19100 series, INSPIRE, LPIS and web development of a geoportal web application for agriculture

Business or sector Education and Research



#### **EDUCATION**

## 10.2015 – 11.2016 Masters degree in Geodesy

Faculty of Technical Sciences, University of Novi Sad

- Geodetic Surveying
- Engineering
- Geoinformatics and GIS
- Web Development
- Research methods

## 10.2011 - 10.2015 Bachelors degree in Geodesy

Faculty of Technical Sciences, University of Novi Sad

- Geodetic Surveying
- Engineering
- Geoinformatics and GIS
- Programming and informatics

### 9.2007 - 6.2011 Geodetic Technician

Secondary Civil Engineering and Technical school "Neimar" Nis

- Land Surveying
- Engineering
- Drafting and AutoCAD

#### RESEARCH EXPERIENCE

### **Publications**

- Bulatovic, V., Vasic, D., Markovic, M., Jankovic, N. (2015) Utility information systems practice book. Novi Sad: University of Novi Sad ISBN: 978-86-7892-822-2
- Fogliaroni, P., Bucher D., Jankovic, N., Giannopoulos, I. (2018) Intersections of our world.
  In Proceedings of the 10th International Conference on Geographic Information Science (GIScience)
- Jankovic, N., Govedarica, M., Navratil, G., Fogliaroni, P., (2018) Domain model of an agricultural information system based on standards. *Geodetski Vestnik*, 61(1)
- Marković, M., Vasić, D., Janković, N. (2016) Comparative Analysis of the accuracy and reliability preanalysis of conventional methods and GNSS method of survey. *Geodetska* sluzba,121, 48-61, UDK: [528.33+528.35]:[621.396.98+528.06]
- Marković, M., Vasić, D., Ninkov, T., Petković, M., Janković, N. (2016) Application of modern geodethic methods during the construction of highrise buildings. *Zbornik Radova Gradjevin-skog Fakulteta*,987-996, DOI: 10.14415/konferencijaGFS2016.100

## Conferences presentations and attendance

- COSIT 2017 Conference on Spatial Information Theory, L'Aquila Italy, Presentation on doctoral colloquium of PhD topic
- IGSM 2017 (International Geodetic Student Meeting), Zagreb, Croatia Poster presentation: Semantic web in GIS
- IGSM 2016 Munich, Germany Oral presentation: Application of modern Geodetic methods during the construction of highrise buildings
- IGSM 2015 Espoo, Finland Oral presentation: Crowdsourcing and open-geospatial data
  volunteered geographic information
- IGSM 2014 Istanbul, Turkey Poster presentation: Integration of LiDAR and UAV data
- RGSM 2017 (Regional Geodetic Student Meeting), Ljubljana, Slovenia Oral presentation:
  Research activities in geodesy and geoinformation at TU Wien



### Student research

- Modeling an information system for agricultural holdings using standards (master thesis)
- Integration and acquisition of data used for modeling of flood zones (bachelor thesis)
- GML and spatial databases (university award research paper)
- Implementation of LPIS using open-source solutions
- Application of Least squares, Gauss algorithm, data snooping and iterative methods in adjustment of networks in MATLAB
- Active geodetic reference networks and distributed systems

#### **VOLUNTEER EXPERIENCE**

## 2013 – 2016 Teaching Fellow

Faculty of Technical Sciences, University of Novi Sad Trg Dositeja Obradovica 6, Novi Sad (Serbia)

Helping with labs in Geodesy and Land Surveying for Civil Engineers, Engineering geodesy and Utility Information Systems.

## 2012 - 2016 Member of the Student union

Faculty of Technical Sciences, University of Novi Sad Trg Dositeja Obradovica 6, Novi Sad (Serbia)

- Organisation of events
- Help with extracurricular activities

### 2014 - Current OSM Volunteer

OpenStreetMap Foundation, Humanitarian OpenStreetMap Team

- Local mapping
- Mapping in humanitarian relief

## 10.2015 Accessibility Audit Volunteer

Accessibility audit association Serbia http://mapapristupacnosti.rs/

Mapping and editing information about accessibility in Serbia.

## TRAINING AND COURSES

## 1.2020 FitSM Advanced - Service Operation and Control

APMG International -

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## 1.2020 FitSM Advanced - Service Planning and Delivery

APMG International -

Link: https://www.youracclaim.com/badges/977ea277-5632-4bbb-aa4e-97795d97f2d6/linked\_in\_profile

## 12.2019 Scrum Certification Prep + Scrum Master + Agile

Udemy course - Link: https://www.udemy.com/certificate/UC-MXXXM782/

### 11.2019 FitSM Foundation

APMG International -

Link: https://www.youracclaim.com/badges/900a3a6a-c748-4881-8798-538728d7c80a/linked\_i



## 11.2019 Nginx Fundamentals

Udemy course - Link: https://www.udemy.com/certificate/UC-7QGLH7GP/

## 2.2019 REST APIs with Flask and Python

Udemy course - Link: https://www.udemy.com/certificate/UC-I5P13GNB/

## .7.2017 Build 10 real world applications with python

Udemy course - Link: https://www.udemy.com/certificate/UC-FUH20ZDU/

## 11.2017 Web developer bootcamp

Udemy course - Link: https://www.udemy.com/certificate/UC-L9X0S3A1/

## 10.2015 ESRI: Going places with spatial analysis

Udemy course by ESRI, License Number: UC-KR9N6YNT

#### PERSONAL SKILLS

## Mother tongue Serbian

#### Other languages

UNDERSTANDING		SPEAKING		WRITING
Listening	Reading	Spoken interaction	Spoken production	
C1	C1	C1	C1	C1
B2	B2	B2	B2	B2

English German

> Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2: Proficient user Common European Framework of Reference (CEF) level

### Soft skills - teamwork

- time management
- communication
- presentation
- teaching

- General computer skills Microsoft Office 365 (Word, Excel, PowerPoint)
  - Microsoft Windows & Linux
  - Google and similar cloud tools (ie. Google Docs, Office Online, Cloud storage and sharing)

  - Wordpress (Worked on https://geoinfo.geo.tuwien.ac.at/)

- GIS and drafting ArcGIS / QGIS / Geomedia
  - AutoCAD / Civil3D / Map3D

Development

- Programming languages and python data+backend (pandas, sklearn, numpy, flask, seaborn, plotly, bokeh, openCV)
  - frontend (HTML / CSS / Javascript / node.js + express / React.js + Redux.js)
  - Geoserver (WMS, WFS, WCS) and Openlayers

  - Nginx
  - PostgreSQL / PostGIS / MongoDB
  - MATLAB
  - Other (basic): Java, C, C#



#### Curriculum vitae

- Other skills understanding of ISO 19100, INSPIRE, OGC standards
  - Reading and writing UML diagrams
  - data visualization and manipulation
  - excellent command of Geodetic Survey Instruments (Total Station, Level, GPS and GNSS)
  - computer assembly / computer building
  - research skills from writing thesis, papers, essays and assistant work
  - teaching skills from university volunteering and teaching assistant work
  - short course on GDPR
  - understands good security practices

#### ADDITIONAL INFORMATION

#### Awards

- OeaD award and scholarship Scholarship Foundation of the Republic of Austria for Undergraduates, Graduates and Postgraduates
- Dositeia award and scholarship for the best 400 master students in the Republic of Serbia
- Dositeja award and scholarship for the best 800 undergraduate students in the Republic of Serbia
- Award for best presentation IGSM 2015
- Award for best poster IGSM 2014
- Award for student paper at the University of Novi Sad (2014)
- Award for success in studies (2011, 2012, 2013, 2014)

#### **Projects**

- PRISM View Server https://gitlab.eox.at/esa/prism
- EOEPCA https://eoepca.github.io/
- Austrian Data Cube https://www.naturgefahren.at/projekte/COPERNICUS/ACube.html
- $\ \mathsf{BMON} \ \ \mathsf{Bodenfe\"{u}chtmonitoring} \ \ \mathsf{https://www.geo.tuwien.ac.at/projects/details/}$
- OpenEO https://openeo.org/
- Deformation measurement and analysis of "Šelovrenac" dam
- Measurement and creation of an information system for record keeping of a cemetery in the municipality "Pećinci"