



Alexandru-Constantin Munteanu



EDUCATION AND TRAINING

PhD in Computer Science

West University of Timișoara [30/11/2021 – Current]

City: Timișoara | Country: Romania | Thesis: Cloud-Native Geospatial Data Processing

M.Sc in Artificial Intelligence and Distributed Computing

West University of Timișoara [30/11/2019 – 30/11/2021]

City: Timișoara | Country: Romania | Thesis: Semantic Segmentation of Vegetation in Remote Sensing Imagery Using Deep Learning

B.Sc in Computer Science

West University of Timișoara [30/11/2016 – 30/11/2019]

City: Timișoara | Country: Romania

Thesis: Deep learning applied for road network extraction

WORK EXPERIENCE

 *West University of Timișoara* – Timișoara, Romania

Teaching Assistant

[2019 – Current]

I am currently teaching laboratories for the following courses:

- Web Design (first year undergraduate course)
- Web Technologies (third year undergraduate course)
- Software Engineering (second year undergraduate course)

 *West University of Timișoara*

Research assistant

[2019 – Current]

I have been involved in multiple research projects:


ROCS (Expanding Romania's Copernicus Ground Segment) - rocs.uvt.ro
HRIA (Hub Român de Inteligență Artificială) - hria.upb.ro
H2020 HARMONIA - harmonia-project.eu
COCO (Adaptivity in cloud-to-edge COntinuum COmputing) - coco.hpc.uvt.ro
BID (Big Data Science) - bid.hpc.uvt.ro/
DiPET - www.chistera.eu/projects/dipet
FUSE4DL - fuse4dl.hpc.uvt.ro/
MOISE - moise.projects.uvt.ro/



Cowork Timișoara

Staff member

[2016 – 2018]

 **Startup Survivor** – Timișoara, Romania

Organizer

[2015 – 2018]


Event managing, web development, technical support

 **AIESEC** – Timișoara, Romania

Team leader

[2015 – 2016]

I was the team leader for the marketing branch in the incoming global volunteer department.

 **Startup Weekend** – Timișoara, Romania

Organizer

[2013 – 2017]

 **CoderDojo** – Oradea, Romania

Mentor, team leader

[2012 – 2016]

- Mentoring kids in introductory courses on computer programming
- Organizing team leader

LANGUAGE SKILLS

Mother tongue(s): Romanian

Other language(s):

English

LISTENING C2 READING C2 WRITING C2

SPOKEN PRODUCTION C2 SPOKEN INTERACTION C2

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

PUBLICATIONS

[2025]

[Benchmarking STAC Ecosystem Server Backends in Dataset Creation Applications](#)

Authors: Alexandru Munteanu, Gabriel Iuhasz, Silviu Panica | **Journal Name:** International Conference on Advanced Information Networking and Applications

[2024]

[On the Performance of STAC-FastAPI and PgSTAC Using a Cloud-Native Deployment](#)

Authors: Alexandru Munteanu, Silviu Panica, Gabriel Iuhasz | **Journal Name:** International Conference on Advanced Information Networking and Applications

[2024]

Data Cubes and Cloud-Native Environments for Earth Observation: An Overview

Authors: Alexandru Munteanu | **Journal Name:** Scalable Computing: Practice and Experience | **Volume, Issue and Pages:** Vol 25, Issue 6

[2023]

In-situ Data Analysis for Determining Air Quality Influential Locations. A Case Study on Lombardy, Italy

Authors: Alexandru Munteanu, Cosmin Bonchiş, Victor Bogdan | **Journal Name:** IGARSS 2023 - 2023 IEEE International Geoscience and Remote Sensing Symposium

[2023]

Building a National Spatio-Temporal Datacube

Authors: Marian Neagul, Ion Nedelcu, Alexandru Munteanu | **Journal Name:** IGARSS 2023 - 2023 IEEE International Geoscience and Remote Sensing Symposium

[2019]

Deep learning techniques applied for road segmentation

Authors: Alexandru Munteanu, Teodora Selea, Marian Neagul | **Journal Name:** 21st International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC)

PROJECTS

Projects Leafs - Leveraging artificial intelligence for forest sustainability - [LeafSStomadmin](#) - <https://gitlab.com/ERDT/Stomadmin>

HONOURS AND AWARDS

Honours and awards ECMWF Copernicus Award - EO Data Challenge FOSS4G Bucharest

JOB-RELATED SKILLS

Job-related skills

Machine learning, python, java, c/c++, bash, PHP, Docker, git version control, GNU/Linux system administration, object-oriented programming, relational databases, geoserver, mapstore2

ORGANISATIONAL SKILLS

Organisational skills

- good organizational skills gained through my experience as organizer in multiple volunteering activities

COMMUNICATION AND INTERPERSONAL SKILLS

Communication and interpersonal skills

- good communication skills acquired through my experience collaborating in research projects