Yana Rueva

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[Personal Website](#)

EDUCATION

MSc in Applied Geoinformatics   **March 2023 – July 2025**
University of Salzburg, Austria

- Dissertation title: "Sentinel-2 multitemporal approaches for tree species classification: Mapping a riparian forest composition"
- Supervisor: Assoc. Prof. Dr. Hermann Klug

BSc in Conservation Biology and Management   **2018-2022**
University of Stirling, Scotland, UK

- Dissertation title: "Application of SAR for wetland conservation: A case study on evaluation of the impact from road infrastructure on wetland hydrology in Rupununi region, Guyana"
- Supervisor: Assoc. Prof. Dr. Armando Marino

High school Diploma   **2013-2018**
9 French High school, Alfonse de Lamartine, Sofia, Bulgaria

TECHNICAL COMPETENCIES

Python, JavaScript
- Advanced skills in the two programming languages for geospatial analyses

R
- Intermediate skills for data visualization and geospatial analyses

C
- Intermediate experience with C programming, able to implement concepts in abstraction, algorithms, data structures and memory allocation.

SQL, HTML, CSS
- Novice skills in the three programming languages for web development

GIS and RS softwares:

- Google Earth Engine (using both the JavaScript and Python APIs)
- Sentinel Hub (experience with the Statistical Python API)
- Q-Gis
- ArcGis Pro
- eCognition

- JETI LiVal

Microsoft Word Package

- Full competence in Word, Excel and Power Point

Laboratory and Field Skills

- Conduct continuous spectroradiometer measurements in the field and extract spectral data using appropriate software
- Handle field equipment and measure water parameters in rivers and lakes
- Collecting representative samples of invertebrate communities in rivers and lakes
- Identifying all main taxonomic groups of freshwater invertebrates
- Handle, measure and release fish in field research
- Carry out basic methods and calculations for measurement of mass, volume, time, pH, absorbance, protein concentration and enzyme activity over a range of scales on a variety of biological and environmental materials

PUBLICATIONS

Rueva, Y., Strasser, T. and Klug, H., 2025. Comparison of Sentinel-2 Multitemporal Approaches for Tree Species Mapping Within Natura 2000 Riparian Forest. *Remote Sensing*, *17*(18), p.3194.

McCullough, I.M., Beirne, C., Soto-Navarro, C., Eppert, A., Flatt, E., Kemp, Y.J., Molnár, P.K., Mooring, M.S., Nikolova, Y., Olson, E.R. and Pinto, C., 2024. Integrating high-resolution remote sensing and empirical wildlife detection data for climate-resilient corridors across tropical elevational gradients. *Biological Conservation*, *298*, p.110763.

EXTRA-CIRICULUM ACTIVITIES / RELEVANT EXPERIENCES

University Research Assistant   **Apr 2023 – July 2025**
University of Salzburg, Department of Geoinformatics – Z_GIS, EO Analytics Research Group, Salzburg, Austria

- Supporting research in the area of Remote Sensisng and Geographical Information Systems. Main research focus is time-series analyses, environmental conditions mapping and classification of biotope and habitat types using remote sensing.
- Being involved in the following projects:
  - DANSER   Jan 2025 - Ongoing
  - SpongeCity   Oct 2024 – Dec 2024
  - SELINA   Jan 2024 – Sept 2024
  - EOai4BIO   Apr 2023 – July 2023

Remote Sensing specialist   **Apr 2025 – Jun 2025**
OSA Conservation, Costa Rica

- Conducted LST data analyses as part of the Planet-funded Centinel project. The analyses were based on land use classification previously done for 2022/2023.

Remote Sensing specialist   **Jun 2024 – Oct 2024**

Bulgarian Society for Protection of Birds (BSPB), Sofia, Bulgaria

- Drafting a detailed methodology for analyzing the changes in land cover of grassland habitats and forests within southeast Bulgaria using Landsat satellite images for the periods: 2006, 2014 and 2021

Remote Sensing Intern   **Jun 2023 – Oct 2023**
OSA Conservation, Costa Rica

- Conducted land use classification using Sentinel 1 & Sentinel 2 image collections of the years 2022/2023. The study area encompassed 10 landscapes spanning 8 countries across Mesoamerica. These areas cover a total of 256 971 km² and were previously defined by Osa Conservation as potential climate adaptation hubs. A classification algorithm was adapted specifically for the tropics.

GIS specialist   **Nov 2022 – Feb 2023**
CEE BankWatch Network, Check Republic

- Gather and analyse GIS data of the distribution of fish species from Annex II of the Habitats Directive for Serbia, Macedonia, Kosovo, Montenegro, Albania, Bosna and Herzegovina.

- Prepared preliminary maps to be presented at the Emerald Green webinar on 6-7 December 2022. Supported the moderator and participants of the webinar in the GIS-related enquaries.

- Added the gathered data from experts to the analysis of distribution after the webinar and produce a final version of the database, analysis and maps.

Remote Sensing Intern   **Sept 2022 – Nov 2022**
WWF Bulgaria, Sofia

- Created and evaluated NDWI and NDVI time series post 1994 for two wetland areas in Bulgaria, as well as Iskar Dam. Created animated maps to illustrated change in land-cover and water surface extent.

ERASMUS Internship on Remote Sensing   **2021**
GEO Polymorphic Cloud, Copernicus Relays Center, Sofia, Bulgaria

- Underwent a training on GIS hydrological analyses and flood detection
- Helping develop the initial structure of the organization's web platform

Laboratory and Field Work Assistant   **2021**
Institute of Biodiversity and Ecosystem Research, Sofia, Bulgaria

- Involved in national survey of river fish biodiversity
- Evaluating impact of Ogosta Dam on water quality and trout fishery activities

GIS Assistant   **2020-2021**
Bulgarian Society for Protection of Birds, Sofia, Bulgaria

- Took part in a survey of the overlapping territories of rock climbers and vulnerable bird species. I was responsible for the pre-processing of spatial data, which was then inserted in the GIS software. I was also taking part in the communication between the climbing community and conservation scientists.

Awards and Certificates

IEEE-GRSS International School on SAR Polarimetry   **2024**
University of Stirling, Scotland, IEEE Geoscience and Remote Sensing Society (GRSS)

Beginner course into Java concepts   **2022**
Geo University

Best Student Project   **2019**
Balkan River Defense, Soča River valley, Slovenia

- Part of a team who won the first place on a student project idea for river conservation and received a grand of 500 euros for its realization. The money were later donated to nature conservation NGO in Bulgaria.

LANGUAGES

- English (proficient)
- French (upper-intermediate)
- German (beginner)
- Bulgarian (maternal language)

REFERENCES

Hermann Klug
Associate Professor | Head of Landscape Lab
Faculty of Digital and Analytical Sciences |
Department of Geoinformatics
Schillerstr. 30, Building 15, 3rd Floor, 5020 Salzburg, Austria
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Carolina Ángela Soto-Navarro Senior
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Christopher Beirne
Director of Wildlige Programs, OSA Conservation, Puerto Jiménez, Golfito, Costa Rica
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Vasil Vasilev
Co-owner and RS/GIS specialist at GEO Polymorphic Ltd., Sofia, Bulgaria, +359 87 811 0230,
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