

Konstantin Engelmayer

Curriculum Vitae

Personal Details

Birth 2000/08/18, Köln

Status Student

Languages German (Native), English (C1)

Education

2019 - 2022 **Bachelor of Science, Landscape Ecology**, University Münster, NC (GPA): 1.4

2022 **Bachelor thesis**, Soil Respiration in Forests of Different Land Use Intensity Project BiCO2, in cooperation with Nabu Münsterland and the Forest and Wood Office NRW

2023 - now Master of Science, Physical Geography, Philipps University Marburg, Current NC (GPA): 0.90 Specialization: Environmental Informatics and Climate Impact Research

Work Experience

2021 - 2022 **Student Assistant**, University Münster — Ecohydrology & Biogeochemistry / Biodiversity and Ecosystem Research, Münster, 6 months Supervision of the laboratory internship/ field and laboratory work

2023 **GIS Developer**, *Hydrotec*, Aachen, Internship: 3 months, Part-Time: 4 months

Programming of R and Python tools for automation in heavy rainfall simulations / extreme rainfall modeling using HydroAS $\,$

2024 **Student Assistant**, Philipps University Marburg — Environmental Informatics, Marburg, 6 months

Tutor in various R programming courses, focusing on spatial data analysis and upscaling / Created and improved HTML-based learning environments for students

- 2024 **Student Assistant**, Philipps University Marburg Plant Ecology and Geobotany, Marburg, 4 months
 - FORGENIUS project: developing methods to improve the reproducibility of Pinus pinaster cone classification based on high resolution raster data
- 2024 Student Assistant, Philipps Universität Marburg Laboratory for Climatology and Remote Sensing, Marburg, current employment MW3 project: Investigation of the relationship between solar-induced chlorophyll fluorescence and drought indices using remote sensing techniques

Technical Experience

- Programming: Experienced in R and Python for spatial analyses and data processing.
- OR Packages: terra, sf, caret, cast.
- O Python Packages: xarray, rasterio, geopandas, gdal, scikit-learn.
- API Integrations: Google Earth Code Engine, Microsoft Planetary Computer, and STAC.
- o Web Development: Building and deploying HTML websites via GitHub.
- O Documentation: R Markdown, Markdown.
- O Version Control: GitHub.
- o GIS Software: QGIS, ArcGIS Pro, ArcGIS Online.
- Other Software: Microsoft Office (Word, Excel, PowerPoint), Overleaf (LaTeX), ENVI-met.

For an extended version of my CV and additional project details, click here.