



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

For an extended version of my CV and additional project details, click [here](#).