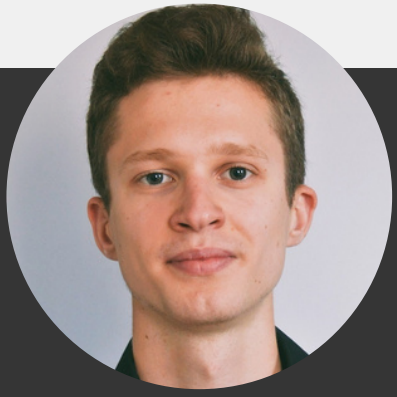

JAKUB MODRZEWSKI

GIS Developer

About Me

Geoinformatics/Geomatics Engineer

Specializing in processing and analyzing geospatial data (both 2D and 3D data)

https://jakubmodrzewski.github.io

jakubmodrzewski12@gmaill.com

Warsaw, Poland

Education

Warsaw University of Technology

BSc in Geoinformatics
2019 - 2023

MSc in GIS & Photogrammetry
2023 - 2024

PhD Student in Digital Twins
2024 - present

Skills

- Python
- GDAL, Shapely, Geopandas
- psycopg2, FastAPI
- PostgreSQL & PostGIS
- QGIS, ArcGIS Pro & Arcpy
- Leaflet
- Docker
- 3D Geospatial Visualizations

Experience

GIS & Digital Twin Specialist — *2023 – 2024*

3DGeoLAB

I was developing Digital Twin 3D applications for cities using Unreal Engine technology. I was also implementing functions for geometry processing of 3D city models (e.g. remove holes and intersected triangles) and conversion geospatial data to 3D formats (e.g. conversion DEM rasters do 3D mesh models).

Python **C++** **CGAL** **Unreal Engine** **Docker**

Researcher & Programmer in R&D projects — *2022 – 2024*

Warsaw University of Technology

I was a contractor (mainly as a programmer) in R&D projects. My work: development WebGIS applications using Leaflet, development of software for processing point clouds, procedural 3D modeling based on geospatial data.

Python **PostgreSQL** **GDAL/OGR** **Leaflet** **GeoPandas** **Shapely** **QGIS** **ArcGIS Pro** **CityEngine**

GIS Programmer — *2021 – 2023*

Insytut Informacji Przestrzennej

I was involved in implementing GIS applications for Geospatial Data Analysis and Geospatial Data Automation (automation of database feeding and updating based on web services – WMS/WMTS, WFS, WCS).
I also was building application with REST API to dynamically creating legends in accordance with cartographic guidelines.

Python **PostgreSQL** **PostGIS** **psycopg2** **GDAL/OGR** **FastAPI**

Software Developer for Document Automation — *2020 – 2021*

Grupa Mowa

I was involved in programming MacOS applications for processing, automation of formatting and correcting text of scientific articles.

Python **AppleScript** **Visual Basic**