



Open Source
Geostpatial
softwares

Nagy Gábor

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Open Source geospatial libraries

the basic building blocks of the open source geospatial softwares

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GDAL/OGR read and write many raster/vector formats
(<https://gdal.org/>)

PDAL read and write many point cloud formats
(<https://pdal.io/>)

PROJ calculation between map projections
(<https://proj.org/>)

GEOS library of 2D vector calculations
(<https://libgeos.org/>)

CGAL library of 3D vector calculations
(<https://www.cgal.org/>)

PCL Point Cloud Library
(<https://pointclouds.org/>)



Desktop OS GIS softwares

the essential tools of open source GIS

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GRASS Geographic Resources Analysis Support System
(<https://grass.osgeo.org/>)

SAGA System of Automated Geoscientific Analysis
(<https://saga-gis.sourceforge.io/>)

QGIS An user friendly desktop GIS software
(<https://www.qgis.org/>)

CloudCompare A point cloud processing software
(<https://www.cloudcompare.org/>)



Server OS GIS softwares and web applications

which provides DB and WxS services

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PostgreSQL A powerful relational database server
(<https://www.postgresql.org/>)

PostGIS GIS extension for PostgreSQL
(<http://postgis.net/>)

GeoServer Java based WMS/WFS/WCS server
(<http://geoserver.org/>)

OpenLayers Web based (run in the browser) map tools
(<https://openlayers.org/>)