FOSSGIS
FREE AND OPEN SOURCE GIS

Getting to grips with FOSSGIS

In this course we will take you on a tour through some popular parts of the FOSS GIS toolset. We will focus on Desktop GIS, GIS Databases and GIS Programming. Our aim is to make you comfortable with FOSSGIS tools for day to day GIS work - be it data capture and visualisation, data management or more complex analytical activities requiring programming.

Desktop GIS (2 Days)

Quantum GIS and GRASS provide a compelling alternative to proprietary GIS in many situations. We will take you through the basics of using these applications and then delve into two key areas - geoprocessing with GRASS and making the most of the rich ecosystem of QGIS plugins.

GeoSpatial Data in PostGIS (1 day)

PostGIS and PostgreSQL provide a powerful, enterprise ready, geospatial relational database management system. With PostGIS you can insert geometries into a database and then perform spatial queries and analysis on that data. We will show you how to import and export data into PostGIS, manipulate that data using SQL queries (including INSERT, UPDATE, DELETE and SELECT operations), and of course visualise the resulting datasets with QGIS. Note that the content in this module will be technical in nature and a basic working knowledge of database systems (tables, fields, primary and foreign keys etc.) is assumed.

GIS programming with Python (2 days)

Many open source GIS applications and libraries can be manipulated using the Python programming language. In this module we will first instruct in the basic usage of the python language. We will then look at the shapely and numpy modules for doing vector and raster based geographic analysis respectively. We will finish by showing how to easily create a QGIS python plugin based on your work that you can then share with others.

About your instructors

Horst Duester
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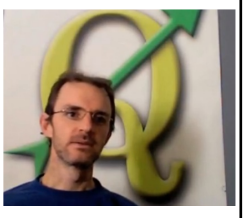
Born in Germany and now resident in Switzerland, Horst Duester is the manager for the Swiss state of Solothurn's GIS group. Horst has lead the development of a complete, integrated GIS system for the state using only FOSSGIS software. Horst is also an active participant of the QGIS project. He has been instrumental in facilitating QGIS's growth through their 'build it, don't buy it' policy which makes the additions and extentions to QGIS that they sponsor available to the greater public. Horst is also an accomplished PostGIS user - it is the cornerstone of their GIS implementation.



Tim Sutton
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Tim Sutton (Swellendam, Western Cape) has been an active contributor to QGIS since the early days of the project. Tim leverages FOSSGIS within his small consulting firm, Linfinti Consulting CC (linfiniti.com) to provide web based and desktop GIS solutions for customers. Tim has a wealth of experience in GIS and system administration to share.