

Marco Poetsch

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GIS Specialist

Profile



I am an enthusiastic and ambitious GIS specialist. My Masters degree and my professional experience allow me to combine a wide range of modern and classic GIS-techniques to create something that matters.

Skills

Geoinformation Software

Autodesk CAD
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AppStudio for ArcGIS
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DHI MIKE Urban
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ERDAS Imagine
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ESRI ArcMap
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ESRI ArcGIS Pro
■ ■ ■ ■ □

R
■ ■ ■ □ □

SPSS
■ ■ ■ □ □

Trimble eCognition
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QGIS
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Geoinformation Programming

ESRI ArcGIS Online
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Google Maps API
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OpenLayers
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OpenGeo Suite
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CSS
■ ■ ■ ■ ■

HTML
■ ■ ■ ■ □

JavaScript
■ ■ ■ ■ □

Python
■ ■ ■ □ □

Design and Creative

Adobe Acrobat Pro
■ ■ ■ ■ □

Adobe Flash
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Adobe InDesign
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Adobe Illustrator
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Adobe Photoshop
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Adobe Premiere
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MAYA, 3Dsmax
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Joomla, WordPress
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Languages

German Speaking
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German Writing
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German Understanding
■ ■ ■ ■ ■

English Speaking
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English Writing
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English Understanding
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Publications

Keul, A., Brunner, B., Poetsch, M. S. & Blachke, T., 2015. Lärm, Luft, Grün und Lebensqualität – Feldforschung in Salzburg-Lehen. In: AGIT 2015 – Symposium und Fachmesse Angewandte Geoinformatik. Berlin: VDE, pp. 480-485.

Poetsch, M. S., 2012. 3D-Browser für Smartphones und Tablets. GIS.BUSINESS, 7-2012

Poetsch, M. S., 2016. Modelling of Homogeneous Regions for Avalanche Risk Assessment – A Comparison of two Regionalisation Methods. GIS. Science, 1-2016.

UNEP 2016. Loss and Damage: The role of Ecosystem Services. United Nations Environment Programme, Nairobi, Kenya.

Extra-curricular courses

Basics of Python (for ArcGIS 10) (ESRI VC)
Cartographic Design Using ArcGIS 9 (ESRI VC)
Creating and Editing Labels and Annotation (ESRI VC)
Creating and Integrating Data for Natural Resource Applications (ESRI VC)
Deriving Rasters for Terrain Analysis Using ArcGIS (ESRI VC)
Distance Analysis Using ArcGIS (ESRI VC)
Introduction to Surface Modeling Using ArcGIS (ESRI VC)
Learning ArcGIS 3D Analyst (ESRI VC)
Learning ArcGIS Spatial Analyst (ESRI VC)
Python Scripting for Geoprocessing Workflows (ESRI VC)
Python Scripting for Map Automation (ESRI VC)
Understanding Map Projections and Coordinate Systems (ESRI VC)
Using Python in ArcGIS Desktop 10 (ESRI VC)
Using Raster Data for Site Selection (ESRI VC)
Working with Rasters in ArcGIS Desktop (ESRI VC)

Augmented Reality (Seminar)
Building Information Models (Seminar)
Open Geo-Content Open Standards Open Data (Seminar)
Webportale für 3D Anwendungen (Seminar)

Hobbies and Interests

Hiking, photography, travelling, and sports, such as ski touring, kayaking, mountain biking and swimming



Employment

■ 07/2014 - 03/2016

Research Associate

Z_GIS, Department of Geoinformatics - University of Salzburg

As a research associate at the Z_GIS - Department of Geoinformatics, I was responsible for multiple national and international projects. The topics of these projects varied from climate change and vulnerability, over crime analyses, to loss and damage reports. My main tasks included GIS-analyses and cartography, as well as geo-design and geo-communication.

Vulnerability Assessment for Mauretania

The aim of this project was to assess the vulnerability of the Mauritanian rural livelihood in the effect of climate change. For this project, I was primarily responsible spatial analyses, cartography, data management and geo-publishing.

Project website: <http://goo.gl/fikxgu>

Primarily used software: ESRI ArcMap, QGIS, R Studio, Adobe InDesign, Adobe Illustrator

UNEP – Loss and Damage Report

Together with the United Nations Environment Programme the Department of Geoinformatics analysed and reported on Loss and Damage (LD) and the role of ecosystem services in Asia, Africa, Europe and North America. My study area was, in particular, the Philippines where the typhoon 'Haiyan' destroyed large parts of the country.

Publication: <http://goo.gl/8c4rnL>

Project website: <http://goo.gl/mIOPN8>

Primarily used software: ESRI ArcMap, ESRI ArcGIS Pro, ERDAS Imagine, QGIS, Adobe Illustrator

Climate Change in Austria

In collaboration with the Central Institute for Meteorology and Geodynamics (ZAMG) and the Wegener Center for Climate and Global Change at the University of Graz, this project aimed to analyse the past and the future climate change in the Austrian states. The Z_GIS was mainly responsible for the geoinformation preparation, publishing, and management.

Project website: <http://goo.gl/72hGvM>

Primarily used software: ESRI ArcMap, ESRI ArcGIS Pro, R Studio, Adobe InDesign, Adobe Illustrator, Survey Monkey

Crime Prediction Analyses

A real-time, web- and GIS-based reference system was developed in order to improve the accuracy of crime predictions. For this project, my primary duties were the design and the geo-communication of project outcomes.

Project website: <http://goo.gl/YKciTj>

Used software and techniques: Joomla, Illustrator

■ 10/2013 - 06/2014

Research Assistant

Z_GIS, Department of Geoinformatics - University of Salzburg

As a research assistant my primary duties were to support research projects and teaching GIS-classes. Furthermore, I was also responsible for geo-communication and event management.

Quality of Life

This ongoing project aims to investigate the quality of life in urban areas. Different indicators which might influence the quality of life are identified and evaluated with the use of measurement techniques. The air quality, including CO, NO2 and fine particulates, noise, and the vegetation density, but also subjective perceptions are combined to estimate the quality of life. I was responsible for the field work and for the evaluation and analysis of the data.

Publication: <http://goo.gl/ZqB1Rv> (in German)

Primarily used software: Trimble eCognition, ESRI ArcMap, Tableau, Excel

Trends and Actors in GIScience

This small project illustrates the development of GIScience in the last two decades. My tasks were the bibliometric analyses and the presentation of GIScience-related publications including their systematic (bibliometric) network.

Publication: in progress

Primarily used software: SCOPUS, WoK, VOSViewer, Pajek

■ 03/2013 - 07/2013

Intern

Department of Geography - University of the Aegean

During my internship I developed an interactive WebGIS platform. Users of the application can access relevant information but are also able to create information and share it with the public. To ensure low costs, I created this application solely using FOSS GIS.

Primarily used software: OpenLayers, GeoServer, PostGIS, Adobe Photoshop, Adobe Illustrator

- 10/2012 - 01/2013 **Research Assistant**
Z_GIS, Department of Geoinformatics - University of Salzburg
For this position I primarily worked with ArcGIS Online to investigate its potential for the department. I was also the teaching assistant for the Spatial Analyses course.
- 06/2012 - present **Account Manager**
Onyx Technology
Onyx Technology developed an outdoor navigation system for Android, iOS, Blackberry and Java. This application, called Ape@Map, allows using high-quality outdoor maps, tracking, outdoor routing and more. I am responsible for the customer support and design issues.
- 10/2011 - 07/2012 **Tutor**
Department of Geography and Geology - University of Salzburg
During my studies, I was tutor for different classes, namely 'Advanced Geoinformation', 'Spatial Analyses' and 'Remote Sensing and Applied Image Processing'. My tasks were to support teaching operations, work with students and review their assignments.
- 07/2008 - present **Web- & Media Design**
Freelance
As a Web- and Media-Design freelancer I develop corporate designs and realise CMS-solutions using Joomla, Typo3 and WordPress.



Education

- 2011 - 2014 **Master of Science, Applied Geoinformatics**
Z_GIS, Department of Geoinformatics - University of Salzburg
Master Thesis: Modelling Avalanche Risk Assessment Zones: A Comparison of two Regionalisation Methods
- 2008 - 2011 **Bachelor of Science, Geography**
Department of Geography and Geology - University of Salzburg
1st Bachelor Thesis: India: Commercial Policy since 1991
2nd Bachelor Thesis: Risk Analysis - Wildfire. Case Study Ventura County, California
- 2001 - 2005 **Web- & Media Design**
Higher Technical Institute - HTBLA Salzburg



Honors & Awards

Graduation with Distinction - 2014

Master of Science in Applied Geoinformatics

Scholarship for High Performance - 2012

Bachelor of Science in Geography