

OLIVER ROICK

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I am a geographer who builds database-driven web applications that assist in collecting, visualising and analysing geographic information.

I have experience in data modelling, designing and implementing web APIs to disseminate geographic data and maps. I have also built browser-based applications to collect, manage and visualise geographic information.

PROFESSIONAL EXPERIENCE

■ SINCE SEPTEMBER 2013

Developer, Extreme Citizen Science Research Group, University College London, United Kingdom

- Designed, implemented and maintained GeoKey, a platform for participatory mapping; including data modelling, API design and documentation, and testing.
- Led software developers of the research group through agile project management. Created and introduced guidelines for software development, code quality and testing.
- Advised the social enterprise “Mapping for Change” in designing and developing the new Community Maps platform. Implemented automated data migration between the old and new system.

■ APRIL 2010 TO AUGUST 2013

Research Assistant, Chair of GIScience, Ruprecht-Karls-University Heidelberg, Germany

- Conducted scientific studies, which focussed on analysis and visualisation of user-generated geographic information, such as OpenStreetMap and location-based social networks.
- Led the re-implementation of client-side components of OpenRouteService, a web-based routing service based on OpenStreetMap and OGC OpenLS specification.
- Design and implementation of OSMatrix (back-end and front-end), including data processing and visualisation of results via a custom Tile Map Service and a web API.
- Created lab courses and held seminars for graduate students, teaching aspects web-based GIS.
- As head of the local organisation committee, I helped organise FOSSGIS 2011, the leading German speaking user conference for open-source GIS.

KEY SKILLS

- Designing and building database-driven web applications
- Geographic data visualisation
- API design and documentation
- Data modeling
- Agile project management
- Test-driven development

PROGRAMMING LANGUAGES

- JavaScript
- Python
- Java

FRAMEWORKS

- NodeJS
- Django
- OpenLayers2
- Leaflet
- D3
- jQuery
- Mapnik
- Geoserver

DATABASES

- Postgres + PostGIS
- MySQL

VERSION CONTROL

- SVN
- Git + Github

PROFESSIONAL EXPERIENCE (CONTINUED)

■ SEPTEMBER 2008 TO MARCH 2010

Research Assistant, Chair of Geoinformatics, Friedrich-Schiller-University Jena, Germany

- Designed and implemented a mobile application for in-field meta data management of hydrologic gaging stations.
- Designed and implemented an API to synchronise collected data with the River Basin Information System (RBIS).

ACADEMIC EDUCATION

■ OCTOBER 2001 TO JUNE 2008

Diploma (equivalent to Master's degree) Studies at Friedrich-Schiller-University Jena, Germany

- Majors: Geography, Computer Science and Geology
- Diploma thesis at International Institute for Geo-Information Science and Earth Observation (ITC), Enschede, The Netherlands; Thesis title: "Using open standards for browser-based integration and visualisation of geo-spatial data"

CERTIFICATES

- BCS Foundation Certificate in Agile Project Management

References are available upon request.