
TECHNICAL SKILLS

Programming: JavaScript, Python, R, RDF/Semantic Web, SQL, Flask, React/Redux, Falcor, RxJS, LevelDB, Postgres

GIS: qGIS, Web Cartography, OpenStreetMap APIs, MapBox-GL, PostGIS

PROJECTS

Rivium

rivium.io

A data discovery platform for analyzing loosely structured data. The application leverages the semantic web RDF data model, and is built out across a number of backend Spring Boot microservices. Client architecture leans heavily on Falcor, RxJS, and React/Redux.

OpenStreetMap Logging Roads

loggingroads.org

A platform to crowdsource citizen monitoring of rainforest logging activities. Collectively mapped over 3000 km of logging roads, identifying instances of illegal logging. The project won the 2015 **Eye on Earth Data Innovation Showcase**.

- Designed the web client for in-browser analysis of satellite imagery and project editing statistics
- Deployed custom rebuilds of the OSM iD Editor and Humanitarian OpenStreetMap Team's Tasking Manager applications
- Oversaw project management with partners in Washington DC, LA, and the DR Congo, leading five user training sessions

Moabi DRC

rdc.moabi.org

An open-source geodata management platform based on OpenStreetMap for forest monitoring in the Congo Rainforest

- Built the site front end using leaflet.js for web map visualization alongside the Jekyll static-templating framework
- Oversaw a growing team of project partners and consultants, and led project trainings in the DR Congo and across the US

EXPERIENCE

Berico Technologies *Software Engineer, 2015 - present*

Built web platforms to manage large, loosely structured datasets for government and private sector multi-year contracts.

- **Rivium:** Led front-end development, including team, focusing on web cartography and semantic tools. Led front-end effort to port the app from Ember to React: rivium.io

CrowdCover *Developer - Project Coordinator, 2015 | Cartography Lead, 2013 - 2014*

Developed open source geographic data management platforms for forest governance in the Democratic Republic of the Congo.

Built out the project's web-based monitoring platform and directly managed projects from inception through to completion.

- **Moabi DRC:** Headed web development, cartography, and research and strategy: rdc.moabi.org/en/
- **OSM Logging Roads:** Led web development and strategy in partnership with the **World Resource Institute:** loggingroads.org
- **CongoMines:** Managed the build-out of the **Carter Center's CongoMines** web platform, including team recruitment, database design, client management, and front-end development: www.congomines.org

Independent GeoSpatial Consultant *2012 - 2014*

Consulted on web development, data analysis, research, project management, and cartography with clients and partners.

- **World Bank:** Lead developer of the web-based geodata visualization platform for natural resource governance, managing research teams on both the Dem. Republic of the Congo and Afghanistan
- **GroundTruth Initiative:** Cartography and data analysis for the **MapKibera** and **Kibera Open Schools** projects
- **The Woodrow Wilson Center:** Web development, data analysis and visualization on two published and widely-cited projects on Chinese energy and natural resource management policy
- **Amnesty International USA, Science for Human Rights Fellow:** Research and data analysis on International Human Rights law and humanitarian monitoring projects

EDUCATION

HackReactor | Advanced Software Engineering Immersive – **2015**

San Francisco, CA

Middlebury College | Political Science/Sociology, 3.58 *cum laude* GPA **2006 - 2010**

Middlebury, VT

Hyderabad Central University | 3.83 GPA **2009**

Hyderabad, India