

## TECHNICAL SKILLS

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**Proficient:** JavaScript/Node.js, BackboneJS, Express, Web Cartography, D3, Jekyll, SQL (Postgres/PostGIS), qGIS, HTML/CSS

**Experienced:** Python, Flask, RxJS, Socket.io, R, BookshelfJS, MongoDB, Adobe Creative Suite, OpenStreetMap APIs

## PROJECTS

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### Open Media Dashboard

[github.com/media-dashboard](https://github.com/jameslaneconkling/media-dashboard)

A set of visualization tools and server infrastructure to analyze media event datasets from the GDELT, Phoenix and ACLED projects

- Built a Backbone-D3 front-end module to efficiently visualize large graph database queries
- Used Immutable.js to record changes in graph state, allowing users to undo/redo edits to the dataset

### ImFree | Social Vending Machine of the Future

[github.com/ImFreeApp](https://github.com/jameslaneconkling/ImFreeApp)

A highly scalable, SOE platform to detect latent communities-of-interest based on a user's social media footprints

- Designed the platform's Express-Mongoose User Services backend API, using a flexible schema to store social media data
- Deployed a Natural Language Processing API using Flask and Python NLTK library to analyze user's social media presence
- Constructed the Backbone client with single-page, scroll-based navigation and a flexible Gulp/Browserify asset pipeline

### OpenStreetMap Logging Roads

[loggingroads.org](https://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 is shortlisted as one of 3 finalists for the **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](https://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

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### 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/](https://rdc.moabi.org/en/)
- **OSM Logging Roads:** Led web development, strategy in partnership with the *World Resource Institute*: [loggingroads.org](https://loggingroads.org)
- **CongoMines:** Managed a substantial build-out of the *Carter Center's CongoMines* web platform, including team recruitment, database design, client management, and front-end development: [www.congomines.org](https://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:** Built a web-based geodata visualization platform on transparency and natural resource governance in conflict-ridden and fragile states, managing the research teams on both the Dem. Republic of the Congo and Afghanistan
- **GroundTruth Initiative:** Designed cartography and wrangled with data for the *MapKibera* and *Kibera Open Schools* projects
- **The Woodrow Wilson Center:** Managed 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:** Researched and conducted data analysis for Intl. Human Rights law and humanitarian monitoring projects

## EDUCATION

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**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