

A topographic map of Smith Rock State Park, Oregon, showing contour lines, trails, and the Crooked River. The map is overlaid with several grey circular markers representing rock climbing data points. The text 'Open Source Rock Climbing Data' is prominently displayed in the center. Other text on the map includes 'Smith Rock State Park', 'River Trail', 'Canyon Trail', 'Rope-de-Dope Trail', and 'Rim Rock Trail'.

Open Source Rock Climbing Data

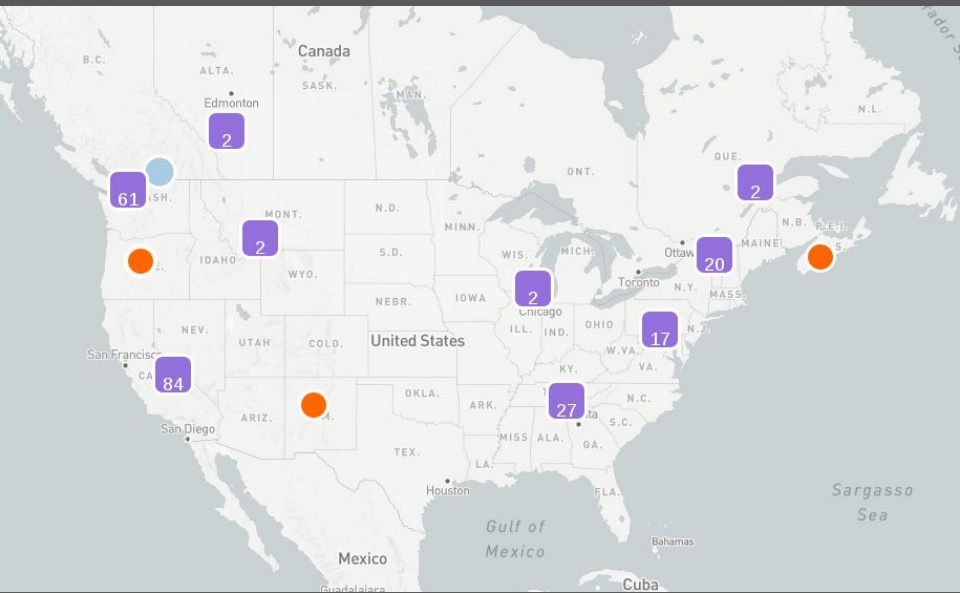
Viet Nguyen - FOSDEM 2018

Viet Nguyen

Portland, Oregon

LatLng: 45.532,-122.674





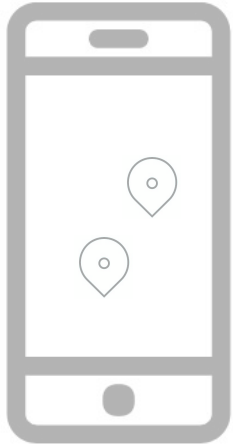
North Atlantic Ocean



OSM TagInfo [sport=climbing]
11,524 objects

April 2017

Goals for the “rock climbing app”



Tasks

Aggregate climbing data from various climbing websites

Search & Filter

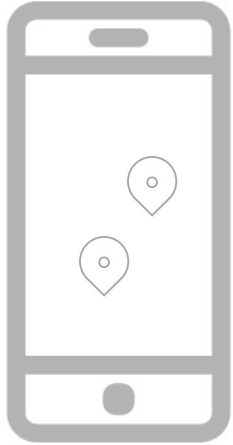


Open Data

Simplify data entry to OpenStreetMap

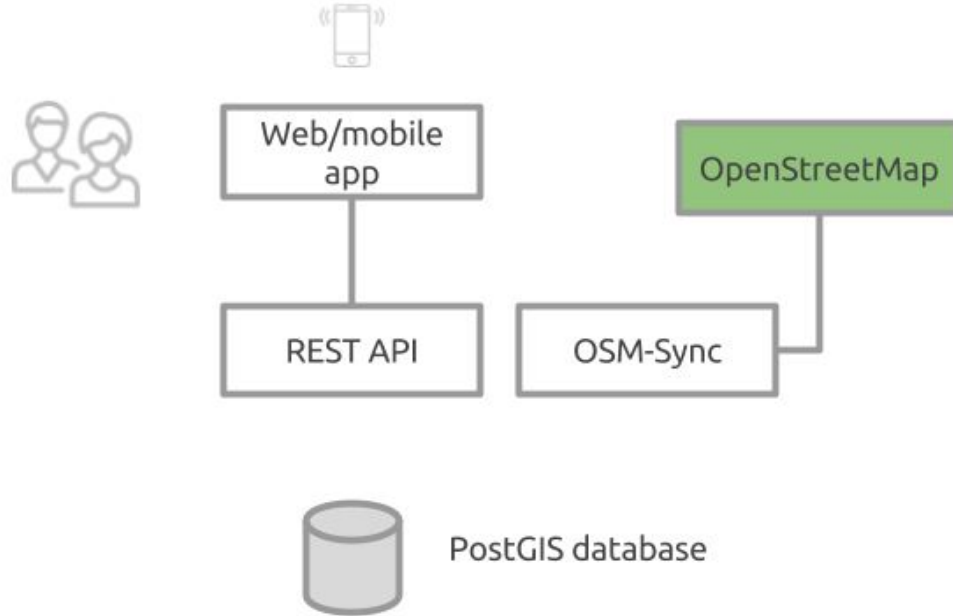
Climbing-specific API, bulk downloading of data

Challenges and Lesson learned



Technical

Community Outreach



Web app: Leaflet, React.js
Rest API: Flask, SQLAlchemy
PostGIS database
Mobile app: TBD

What is climbing data or “Beta”?

*If rock climbing routes are
Git repos, “beta” is the
README.md file*



**Absolute and relative location. Where is it?
and what is nearby?**



Difficulty, specific holds for foot/hand, required
equipment, subjective safety precaution, quality
of rock

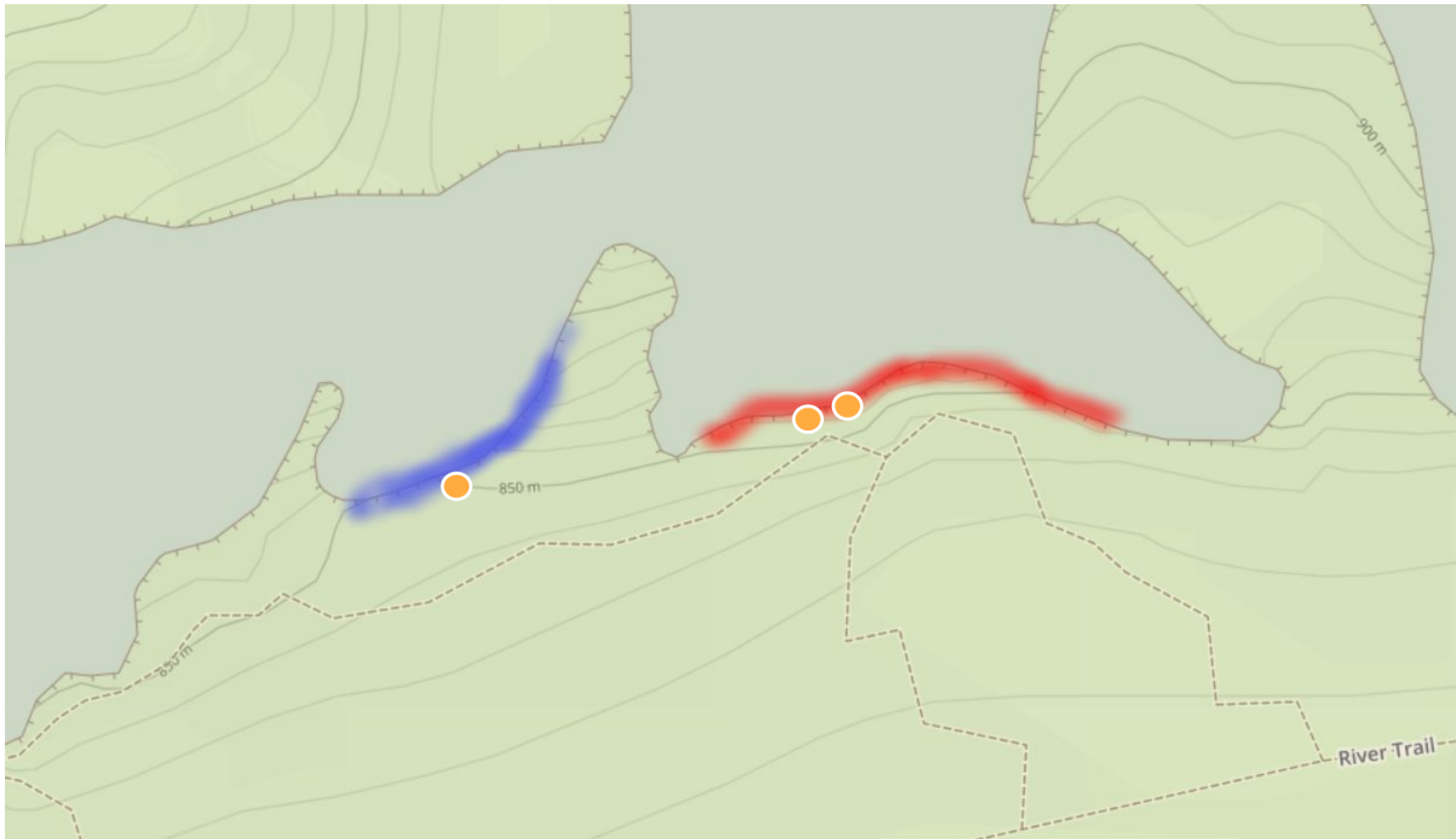


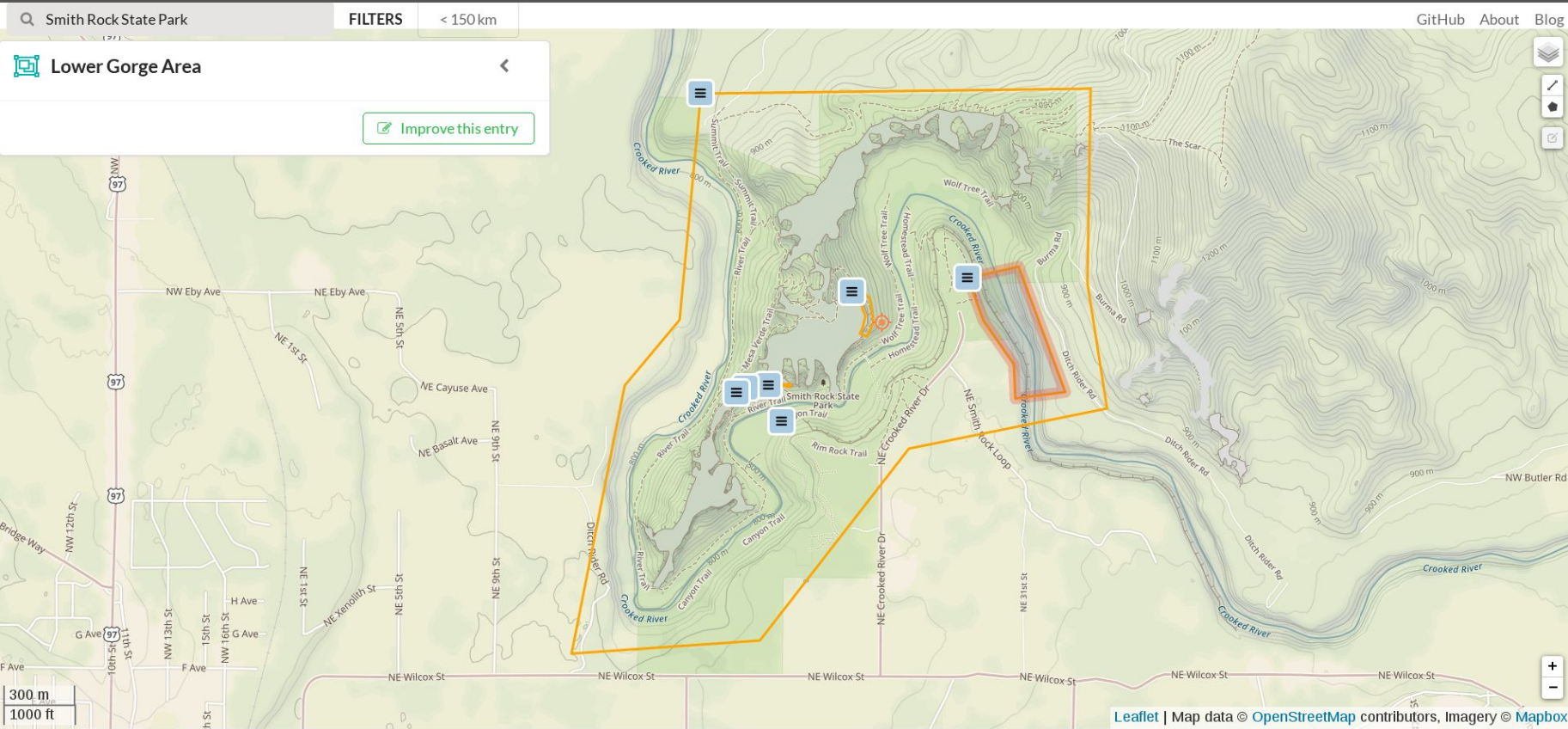
Personal anecdotes, forums

Technical Challenge #1

How to model climbing routes, walls, sectors in OpenStreetMap?







Areas/sectors overview of Smith Rock, Oregon, USA

Model climbing data in OpenStreetMap

Climb

Node, a point with latitude and longitude



Wall

Way, an ordered list of nodes



Sector/Area

Closed Way??



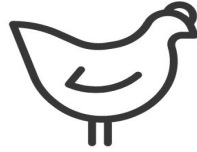
Relation: logical grouping of
 nodes, ways and/or other relations



Non-technical Challenge #1: Community Outreach

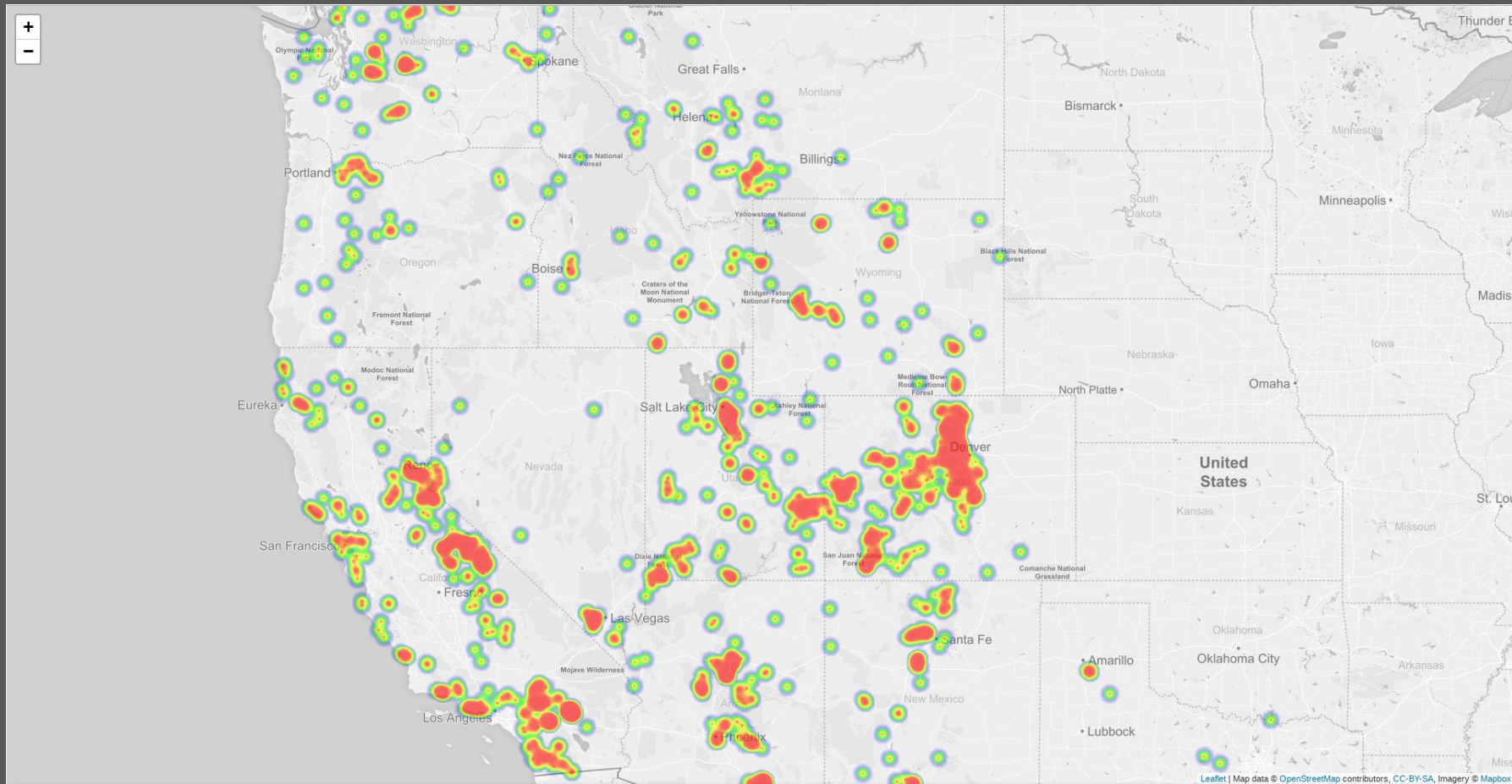
Open data is still a new concept
in the climbing community

Manny Rangel developing a new
route in Arizona



How to get people to contribute?

1. Simplify data entry and editing
2. Seed OSM with correct data



Heat map of climbing walls in western USA. Data from MountainProject.com.



OpenBeta Initiative

<https://openbeta.io>

Viet Nguyen

Email: viet@openbeta.io

Twitter: [@vietgoeswest](https://twitter.com/vietgoeswest)

Github: github.com/openbeta

Attribution

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