Mapzen

Diana Shkolnikov

MAPZEN

MAPZEN

an open-source mapping lab

builds open-source mapping tools and

collaborates on open geodata initiatives

Tribeca
Brooklyn Bridge
FDR Dr
Manhattan Bridge
Park St
Pearl St
Front St
Water St
Gold St
Broad St
Wall St
Nassau St
Pine St
Cedar St
Liberty St
Vesey St
Murray St
Barclay St
Chambers St
Reade St
Warren St
Franklin St
Worth St
Thomas St
Duane St
Hudson St
Greenwich St
Rector St
Albany St
Morris St
Ann St
Fulton St
Maiden Ln
Dover St
Peck Slip
Pearl Plaza
Old Slip
Water Plaza
Fletcher St
Gouverneur Ln
Madison St
Pike St
Rutgers St
Jackson St
Monroe St
Henry St
Catherine St
Oliver St
Division St
Market St
Clinton St
Cherry St
Jefferson St
Montgomery St
Rivington St
Delancey St
Essex St
Norfolk St
Suffolk St
Clinton St
Orchard St
Allen St
Eldridge St
Forsyth St
Chrystie St
Bowery
Lafayette St
Elizabeth St
Mulberry St
Mott St
Baxter St
Centre St
Columbus Park
Canal St
Walker St
Lispenard St
Thomas Paine Park
Hubert St
Laight St
Vestry St
Desbrosses St
Watts St
Spring St
Dominick St
Broome St
Grand St
Kenmare St
Houston St
Bleecker St
Great Jones St
Astor Pl
East 4th St
Cooper Square
Bond St
Lafayette St
Fourth Ave
Broadway
Park Row
Centre St
Chambers St
Reade St
Duane St
Hudson St
Greenwich St
Rector St
Albany St
Morris St
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Kenmare St
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Great Jones St
Astor Pl
East 4th St
Cooper Square
Bond St
Lafayette St
Fourth Ave
Broadway
Park Row

Geocoding

30 W 26th St, NY

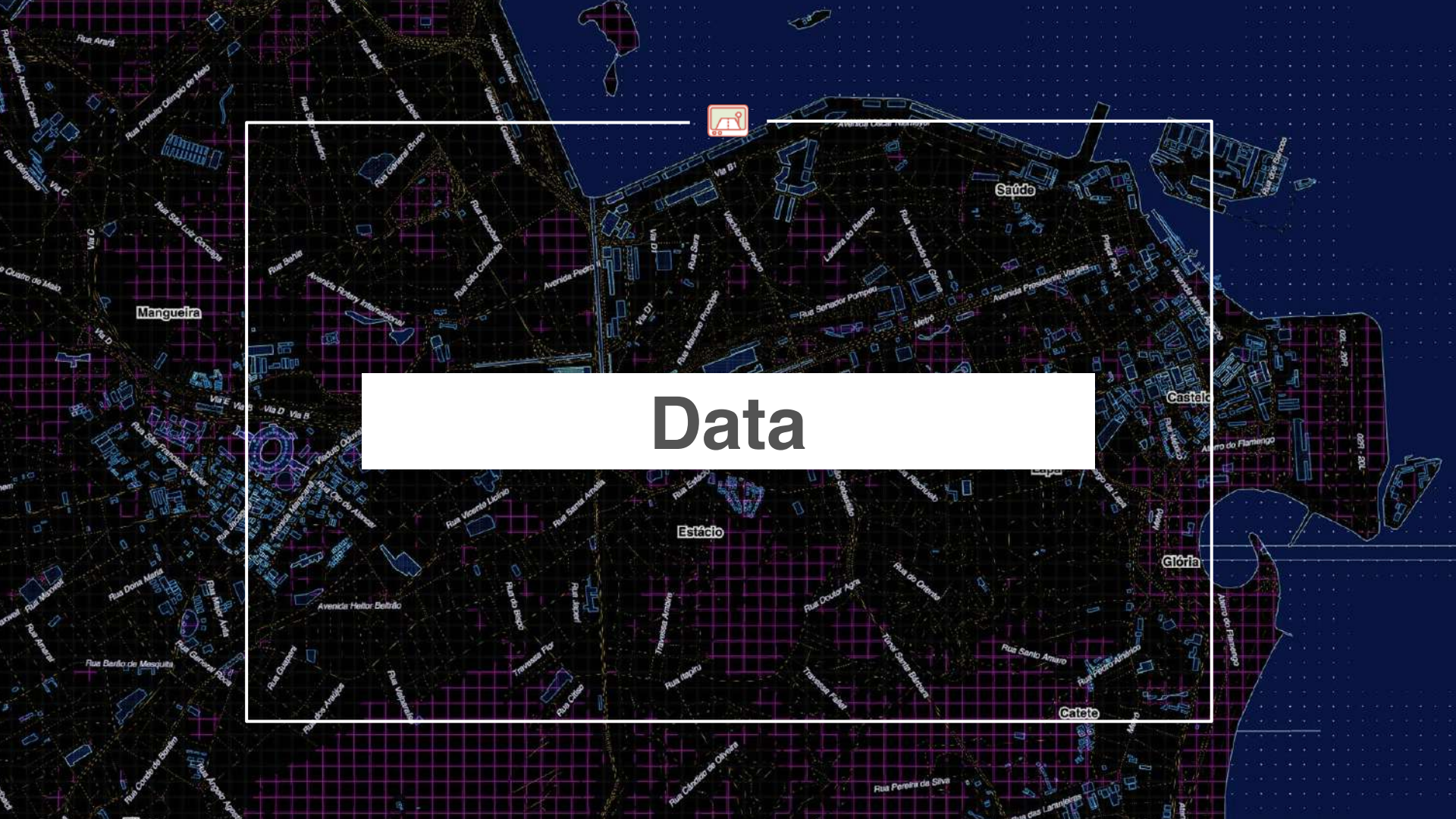
SEARCH

Address | City | State | Zip

30 W 26th St | New York | NY | 10010 | SEARCH

new yo
SEARCH
New York, NY
Pennsylvania Station New York, NY
New York University, New York, NY
New York Penn Station, New York, NY

your current location
SEARCH
30 West 26th Street, Manhattan, NY
Hill Country Barbecue Market, Manhattan, NY
Samsung Accelerator, Manhattan, NY
Hanjan, Manhattan, NY


Data

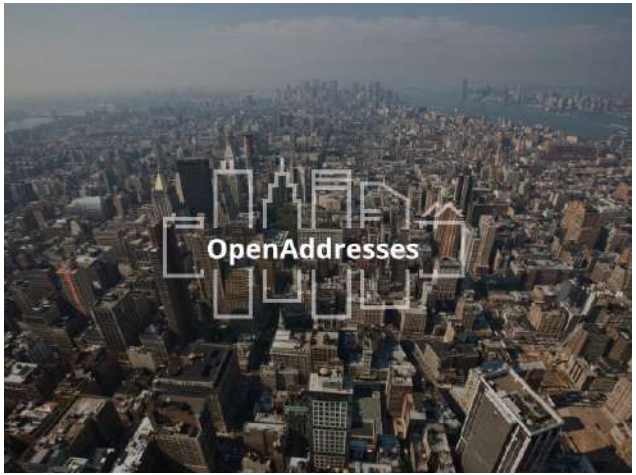
Open Data: WHY?

FREE

Accessible

Community maintained

Open Data: WHERE?



OpenAddresses

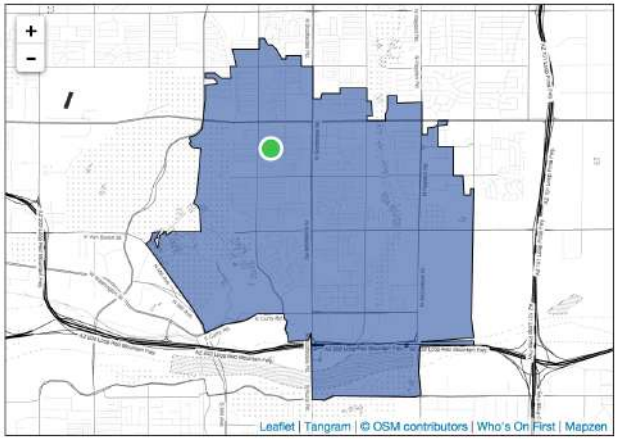
openaddresses.io

Open Data: WHERE?

OpenStreetMap

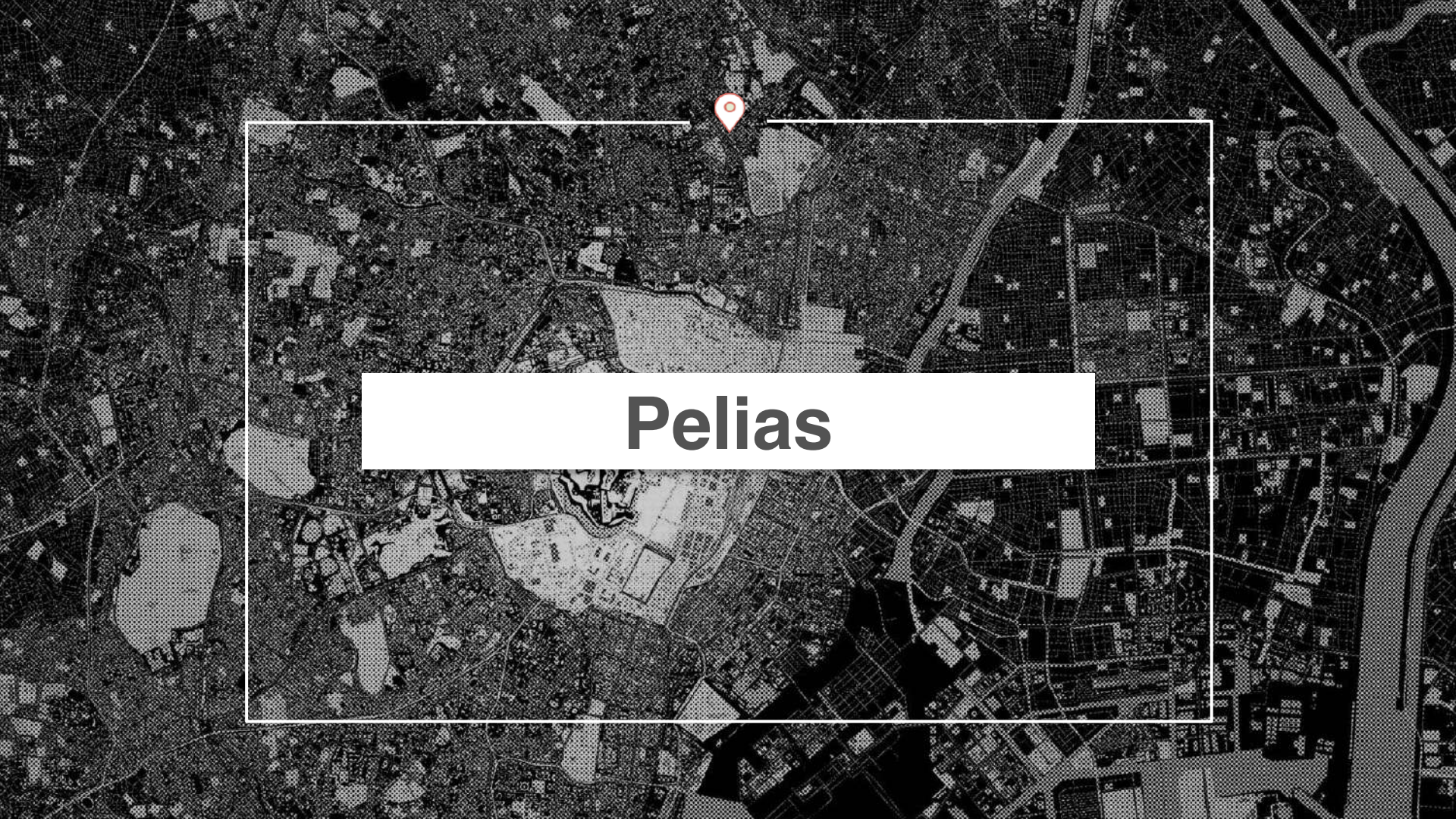
openstreetmap.org

Open Data: WHERE?



Who's On First

whosonfirst.mapzen.com


Pelias

Pelias

- ☑ data agnostic
- ☑ self-hosted
- ☑ flexible and scalable

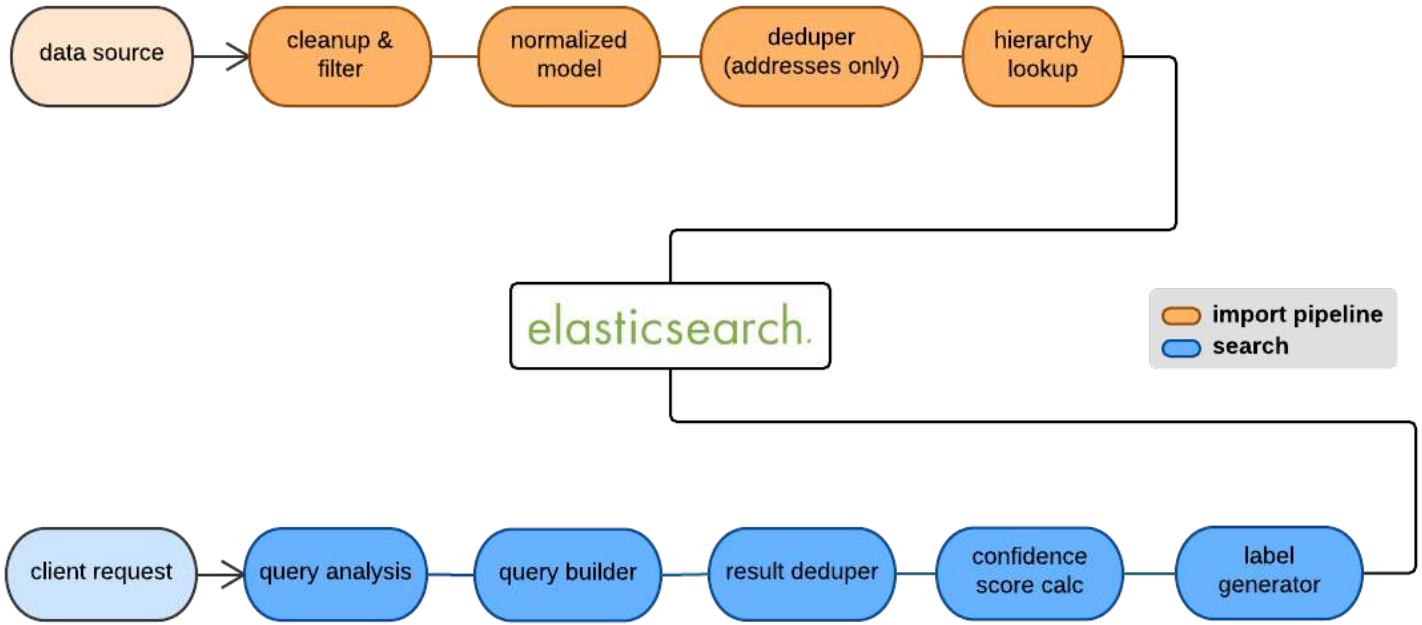
Architecture

Elasticsearch

+

node.js

Architecture

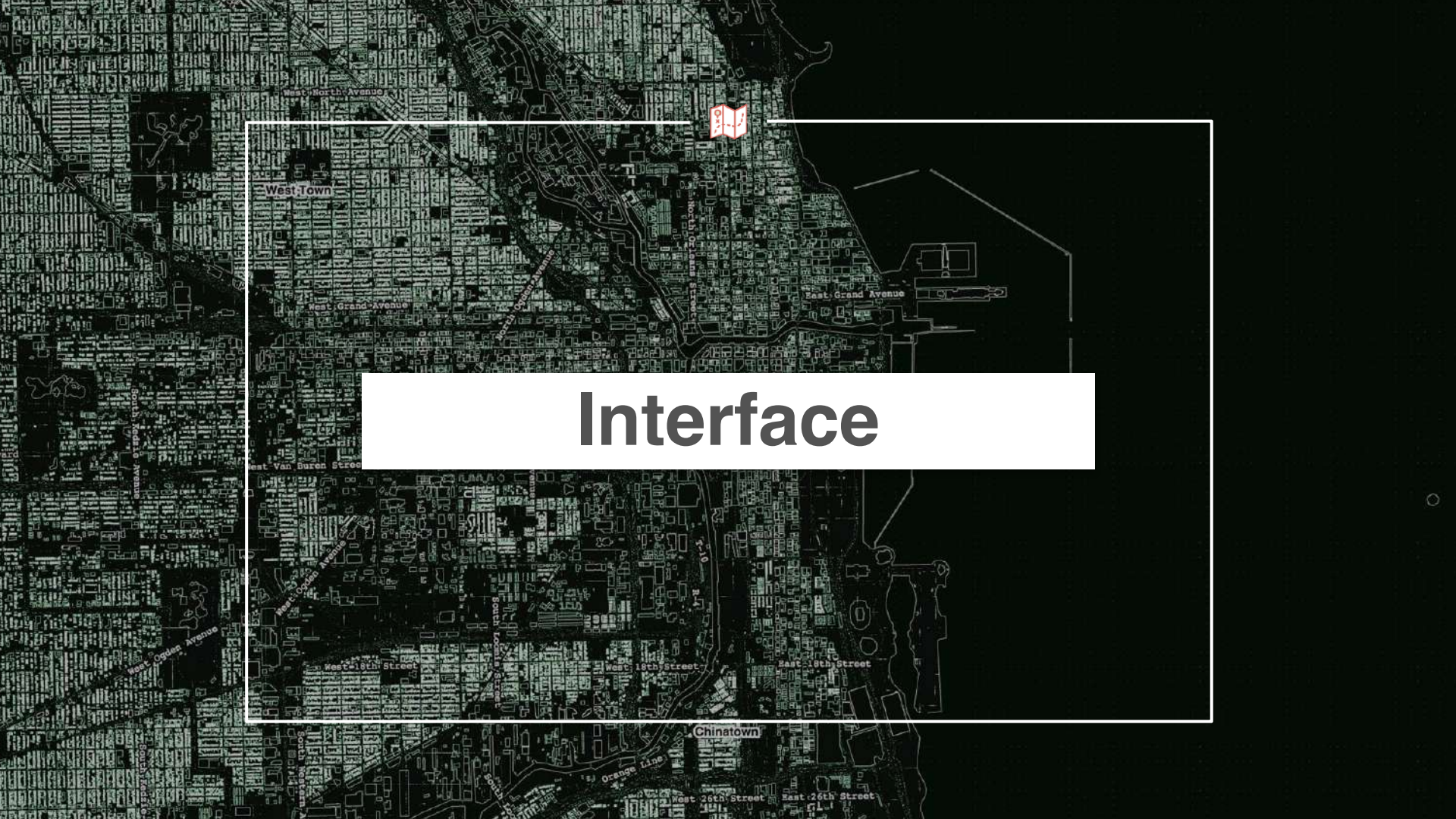


Open Source Project

pelias.io

[code] https://github.com/pelias/pelias

[chat] https://gitter.im/pelias/pelias


West North Avenue
West Town
West Grand Avenue
East Grand Avenue
North Orleans Street
West Van Buren Street
West Ogden Avenue
South Loomis Street
West 18th Street
East 18th Street
Chinatown
Orange Line
West 26th Street
East 26th Street

Interface

Endpoints

/autocomplete

typeahead suggestions

best for incomplete input

Endpoints

/search

full text search queries

best for complete input

Endpoints

/search/structured

componentized text search queries

best for form-data input

Endpoints

/reverse

provide address or venue at a given location

can also be used to determine admin hierarchy

Endpoints

/place

retrieve details of a place using an ID
previously returned by a query

Filters

`size`

number of results to return

Filters

`sources`

`openstreetmap, openaddresses, geonames, whosonfirst`

Filters

layers

address, venue,
neighbourhood, borough, locality,
localadmin, county, macrocounty,
region, marcoregion, country
coarse

Filters

boundary.country

limits results to those only in the specified country

Filters

`boundary.circle / boundary.rect`

limits results to those only in the specified geometry

Context

`focus.point`

geolocation for focusing results

Mapzen Search
Saúde
Mangueira
Estácio
Lapa
Glória
Catete
Castelo

Mapzen Search

- ☑ hosted instance of Pelias
- ☑ rate limited
- ☑ using open data
- ☑ global coverage

Mapzen Search

- ☑ Leaflet plugin
- ☑ mobile SDK
- ☑ Batch processing script

Mapzen Search

[API] https://search.mapzen.com/v1

[docs] https://mapzen.com/documentation/search

[demo] https://mapzen.com/projects/search

[support] search@mapzen.com

Proposed Contributions

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- [x] OpenAddresses data management tools

Proposed Contributions

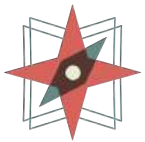
- [x] simplify self-hosted Pelias setup

Proposed Contributions

- [x] fill geocoding gaps in existing solution

Diana Shkolnikov
diana@mapzen.com

Alyssa Wright
alyssa@mapzen.com



contacts