

# Building Modern Geospatial Web Applications Using Free and Open-Source Software, Open Standards, and Open Data


Speaker: Abraham Poorazizi, PhD

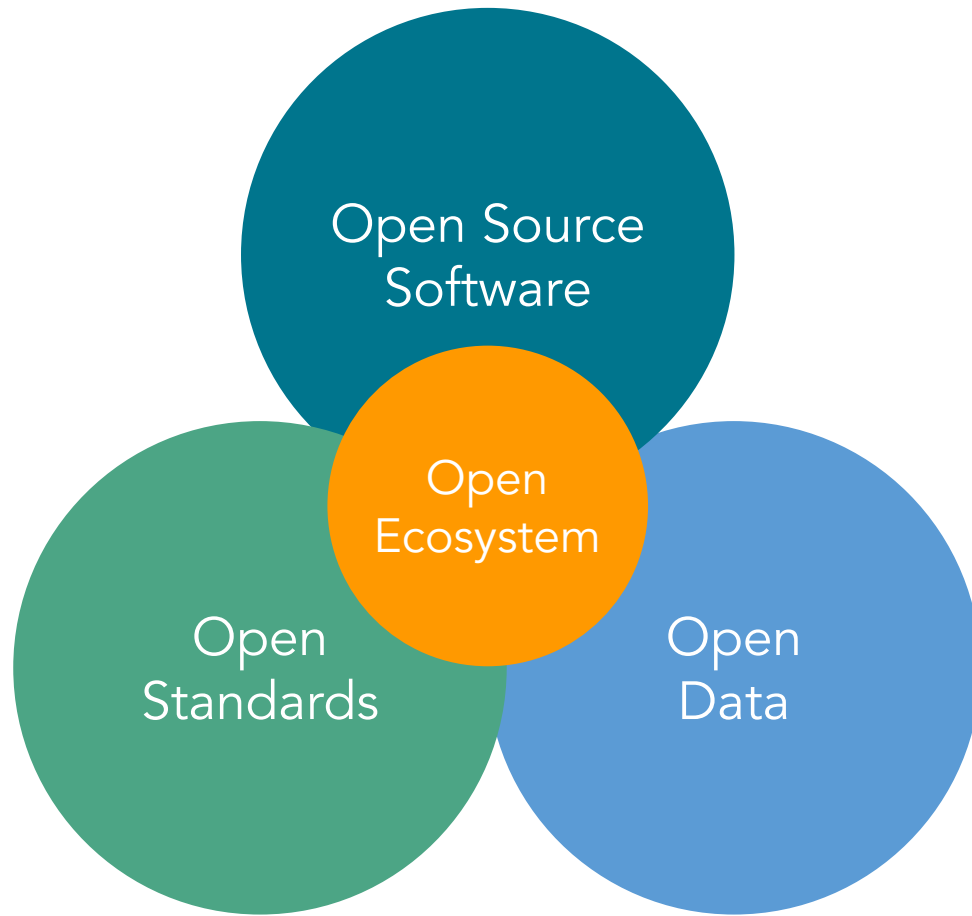
Company: Independent Researcher

# About Me

PhD in Geomatics Engineering  
Technical Project Manager at SensorUp

 @mepoorazizi

 Ebrahim = Abraham



Open is all about freedom

Open is all about community

Open is all about inclusion

- **Open source software:** cost optimization, licensing, scalability, community support
- **Open standards:** flexibility, reusability, easy integration
- **Open data:** data quality, collective knowledge, cost, licensing

# Case Study



## Township Canada

Convert Legal Land Descriptions to and from Geographical Locations



## Requirements:

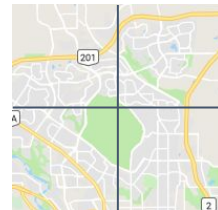
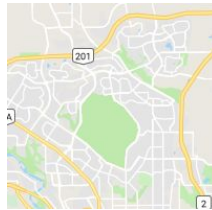
- Smooth grid map (12GB Shapefile)
- Fast lookup (16M rows)
- Low cost

## Components:

- Data Storage
- Map Server
- User Interface



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001010101  
010101010  
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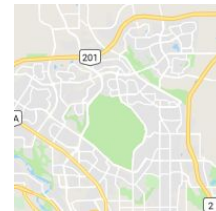


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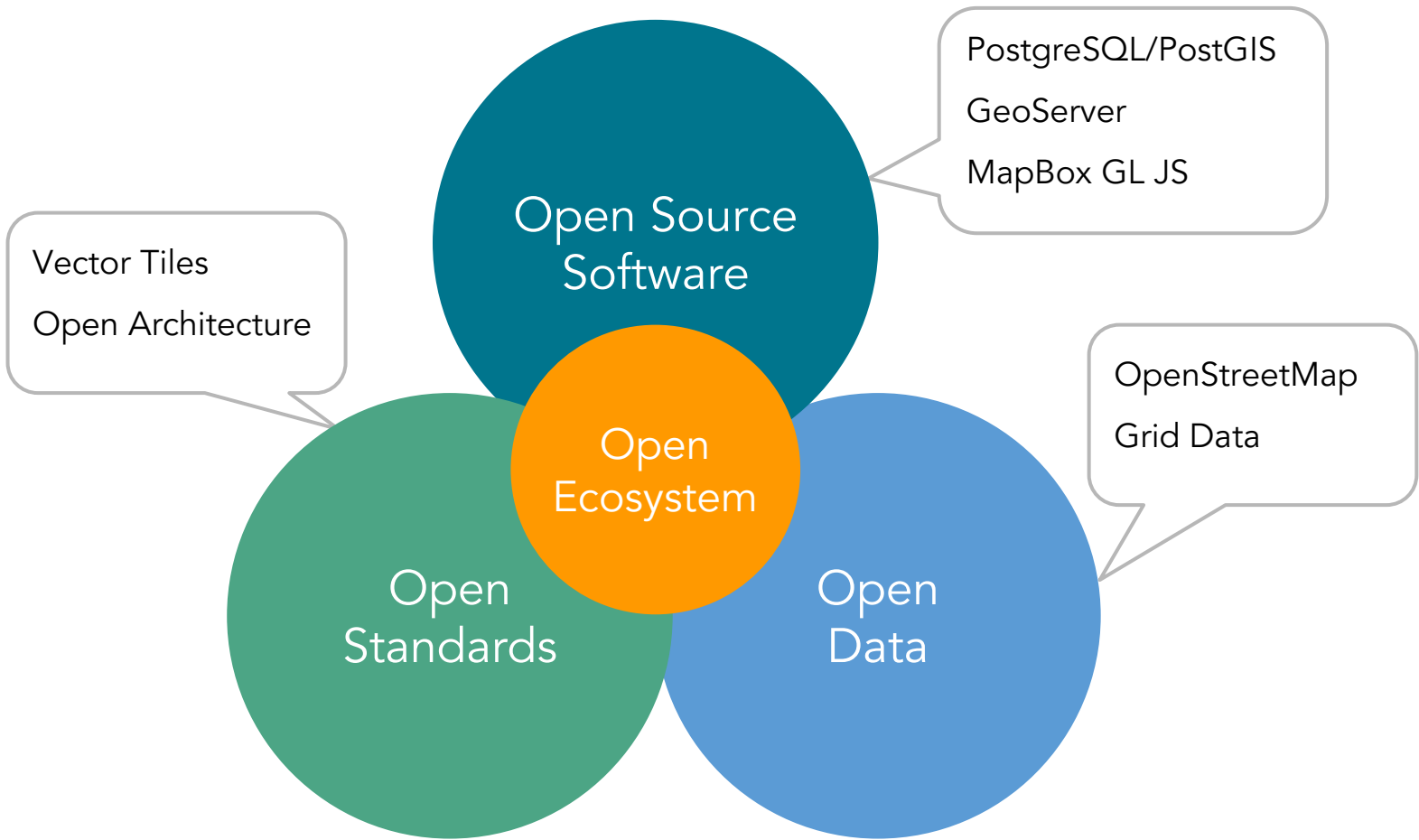


PostgreSQL

is awesome, but fast enough?

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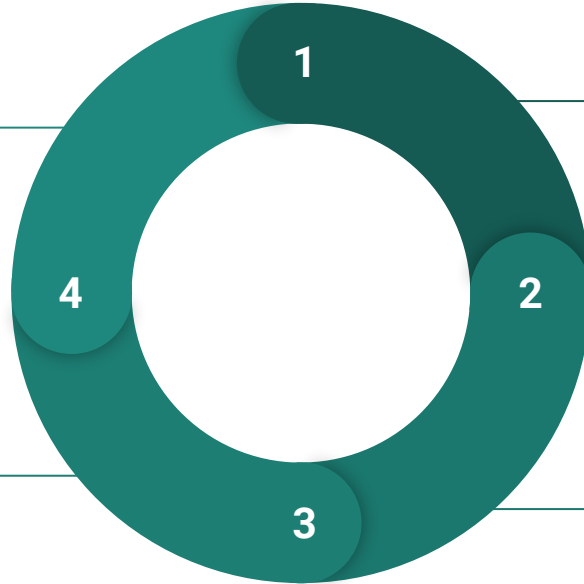




Feedback



Launch



Idea



Build

Presentation Layer



VueJS  
VuetifyJS  
MapBox GL JS

Service Layer



NodeJS  
Express  
Auth0

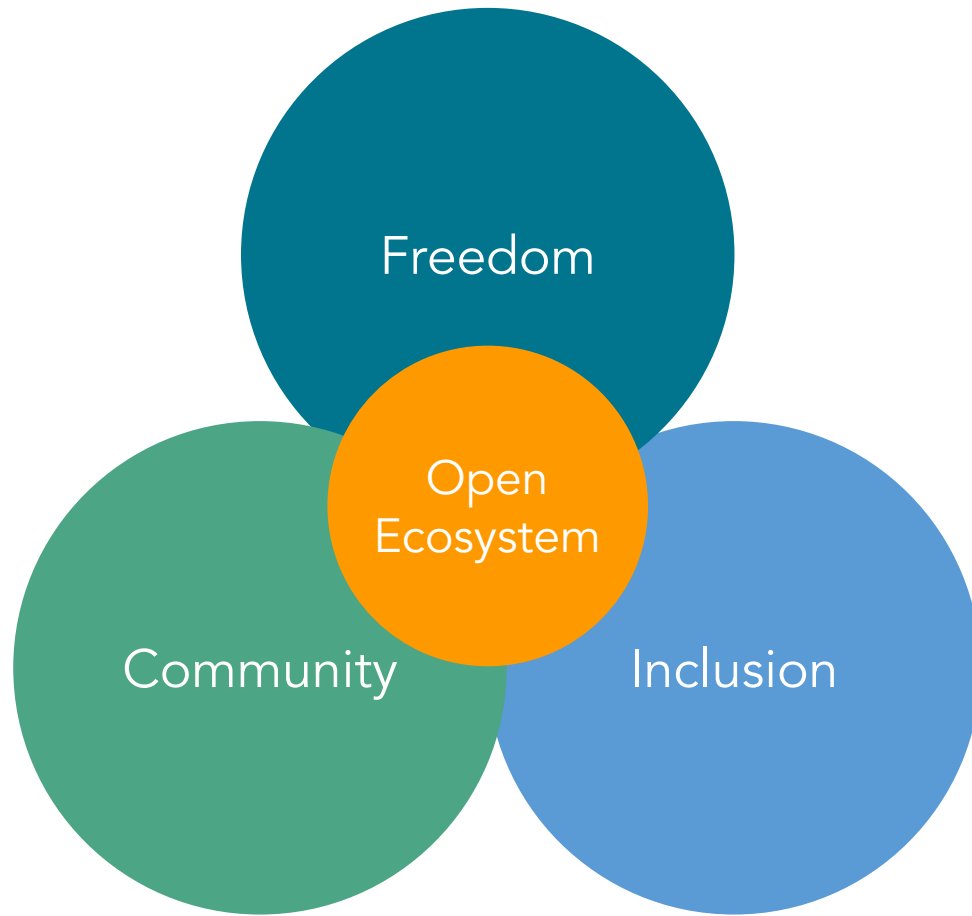
Data Layer



MapBox Tile  
Server

AWS EC2

# Demo



## Challenges:

- Resistance to Change
- Learning Curve
- Proprietary Marketplace

## Solutions:

- Start Small
- Don't Afraid to Try
- Think about Capabilities

Questions?