

# What's **HOT** @ OGC & W3C

Linda van den Brink, Geonovum

# 2 oktober 2019, Amersfoort

@brinkwoman

# #DataToBuildOn

SDI.Ne<sup>xt</sup>

# Het laatste nieuws

## Uw reporter... Linda van den Brink



About ▾ Standards ▾ Innovation ▾ News & Events ▾ Membership ▾ Resources ▾

### Welcome to The Open Geospatial Consortium

The Open Geospatial Consortium (OGC) is an international consortium of more than 530 businesses, government agencies, research organizations, and universities driven to make geospatial (location) information and services FAIR - Findable, Accessible, Interoperable, and Reusable.

OGC's member-driven consensus process creates [royalty free, publicly available, open geospatial standards](#). Existing at the cutting edge, OGC actively analyzes and anticipates emerging tech trends, and runs an agile, collaborative Research and Development (R&D) lab - the [OGC Innovation Program](#) - that builds and tests innovative prototype solutions to members' use cases.

OGC members together form a global forum of experts and communities that use location to connect people with technology and improve decision-making at all levels. OGC is committed to creating a sustainable future for us, our children, and future generations.

Consider [becoming a member today](#) and join our dynamic and diverse global standards community.

#### Standards Currently Seeking Public Comment

- OGC DGGs Standards Working Group seeks public comment on new tasks of work added to its charter  
Closing Date: Thursday, 2019-09-26

#### Initiatives Currently Seeking Sponsors

- Testbed-16
- Disasters Resilience 2019 Pilot

#### Initiatives Currently Seeking Participants

- Vector Tiles Pilot, Phase 2
- CityGML Challenge - win a £5,000 prize
- SELFIE: Second Environmental Linked Features Interoperability Experiment

#### Initiatives Currently Seeking Information

There are no initiatives currently seeking information

### Upcoming Events

- BIM Middle East 2019 Conference and Expo  
23 Sep - 25 Sep
- 11th International Symposium on Digital Earth (Florence, Italy)  
24 Sep - 27 Sep
- The 14th 3D GeoInfo Conference  
25 Sep - 27 Sep
- 8th FIG Land Administration Model Workshop  
01 Oct - 03 Oct
- CityGML Challenge  
24 Oct - 24 Oct

[View all events...](#)

### Recent Tweets

Tweets by @opengeospatial

OGC Open Geospatial: OGC @opengeospatial  
OGC is looking to fund participants in Tiles Pilot, Phase 2, which will advance interoperability for vector tiles using O standards and the latest OGC APIs - geospatial enterprises create custom seamless online/offline use go.myogc.org/2AuzXJZ



Leading the web to its full potential

STANDARDS PARTICIPATE MEMBERSHIP ABOUT W3C

W3C By Region ▾

Skip

#### First Public Working Draft: MiniApp Standardization White Paper

12 September 2019 | [Archive](#)

#### First Public Working Draft: WebDriver Level 2

12 September 2019 | [Archive](#)

#### New Resource: Making Audio and Video Media Accessible

11 September 2019 | [Archive](#)

#### First Public Working Drafts: Pronunciation

5 September 2019 | [Archive](#)

#### Call for Review: Verifiable Credentials Data Model 1.0 is a W3C Proposed Recommendation

5 September 2019 | [Archive](#)

#### Updated Candidate Recommendation for CSS Writing Modes Level 3

3 September 2019 | [Archive](#)

#### Upcoming: W3C Workshop on Inclusive Design for Immersive Web Standards

### ABOUT W3C

The World Wide Web Consortium (W3C) is an international community that develops open standards to ensure the long-term growth of the Web.

### DONATIONS

Become a Friend of W3C: support the W3C mission and free developer tools.

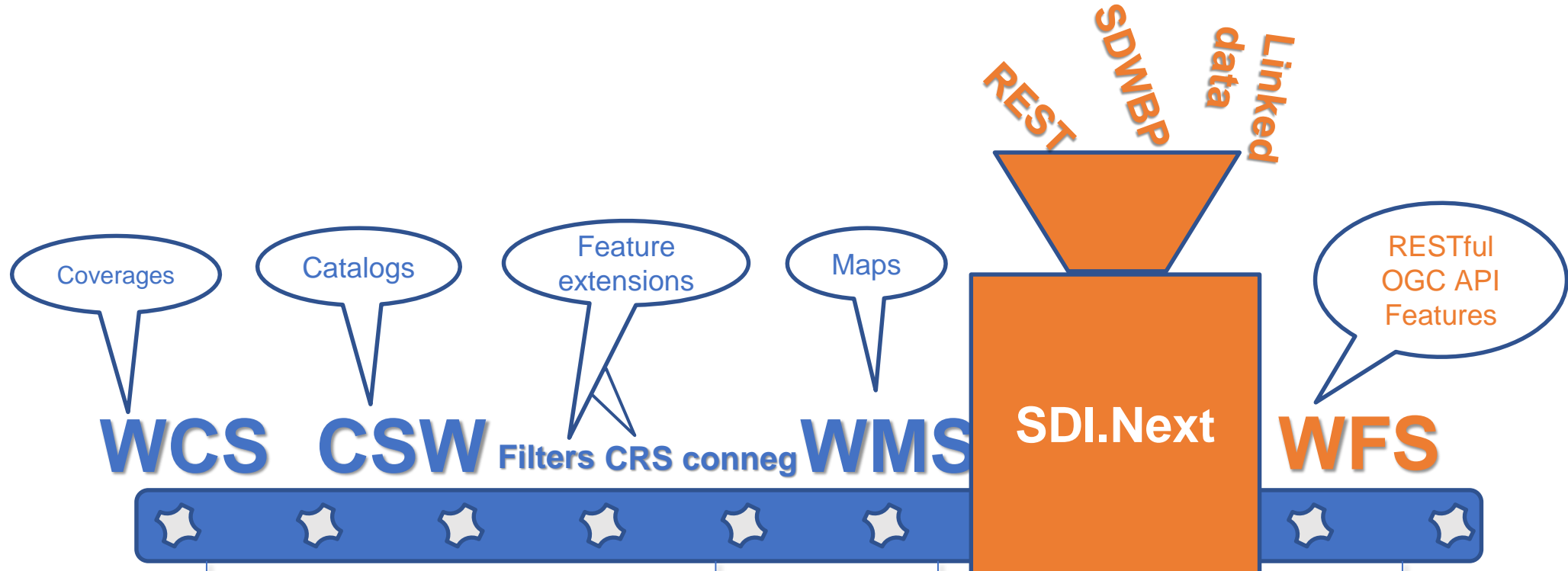
### W3C BLOG

W3C Interview: Coil on Interledger Protocol and Web Monetization  
3 September 2019 by Ian Jacobs

W3C TPAC 2019 Platinum Sponsors announced  
2 September 2019 by Coralie Mercier

# SDI.Next

# Spatial Data on the Web Triggers New Generation of OGC Standards



# OGC and STAC invite developers to Sprint to advance OGC APIs for Features and Catalogues

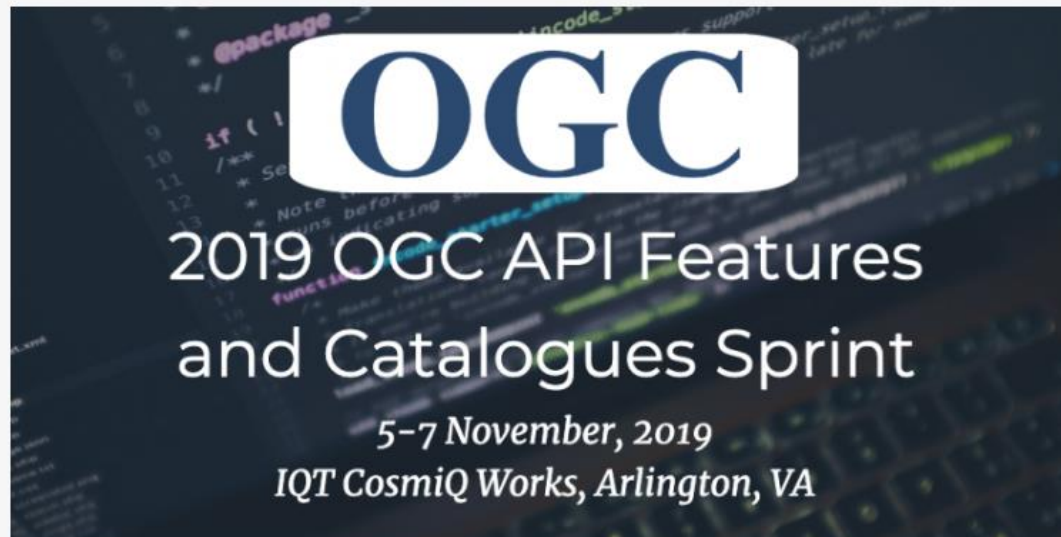
## Contact:

[info@opengeospatial.org](mailto:info@opengeospatial.org)

## Release Date:

Tuesday, 1 October 2019 UTC

*Developers at the '2019 OGC API - Features and Catalogues Sprint' will work on Query and Filter reusable components to standardize geospatial data access across 'OGC API - Features', 'OGC API - Catalogue', and other geospatial API's.*



The Open Geospatial Consortium (OGC) and the [SpatioTemporal Asset Catalog \(STAC\)](#) community together invite developers to participate in the follow-up to the successful [OGC API Hackathon](#). The '2019 OGC API - Features and Catalogues Sprint' will occur at IQT CosmiQ Works, Arlington, VA, USA on 5-7 November, 2019.

OGC has been developing [a new generation of web API standards](#) leveraging OpenAPI to document requirements for implementation. In parallel, but in close coordination, the STAC community has been advancing a specification focused on imagery catalogs, which is based on [OGC API - Features](#).





# Dataset Description Standard Nears Completion

- Metadata Dataset description
- DCAT 2.0 bijna gereed
- Met meer geo
- Toekomstvisie: ISO19115/119 vervangen door Geo extensie van DCAT2.0

TABLE OF CONTENTS	
1.	Introduction
2.	Motivation for change
3.	Namespaces
4.	Conformance
5.	Vocabulary overview
5.1	DCAT scope
5.2	RDF considerations
5.3	Basic example
5.4	Classifying datasets thematically
5.5	Classifying dataset types
5.6	Describing catalog records metadata
5.7	Dataset available only behind some Web page
5.8	A dataset available as a download and behind some Web page
5.9	A dataset available through a service
6.	Vocabulary specification
6.1	RDF representation
6.2	Elements from other vocabularies
6.2.1	Complementary vocabularies
6.2.2	Element definitions
6.3	Class: Catalog

## Data Catalog Vocabulary (DCAT) - Version 2

W3C Working Draft 28 May 2019

### This version:

<https://www.w3.org/TR/2019/WD-vocab-dcat-2-20190528/>

### Latest published version:

<https://www.w3.org/TR/vocab-dcat-2/>

### Latest editor's draft:

<https://w3c.github.io/dxwg/dcat/>

### Previous version:

<https://www.w3.org/TR/2018/WD-vocab-dcat-2-20181016/>

### Latest Recommendation:

<https://www.w3.org/TR/vocab-dcat/>

### Editors:

[Riccardo Albertoni](#)  (CNR - Consiglio Nazionale delle Ricerche, Italy)

[Dave Browning](#) (Refinitiv)

[Simon Cox](#)  (CSIRO)

[Alejandra Gonzalez Beltran](#)  (Oxford eResearch Centre, Engineering Science, University of Oxford)

[Andrea Perego](#)  (European Commission, Joint Research Centre)

[Peter Winstanley](#) (Scottish Government)

### Former editors:

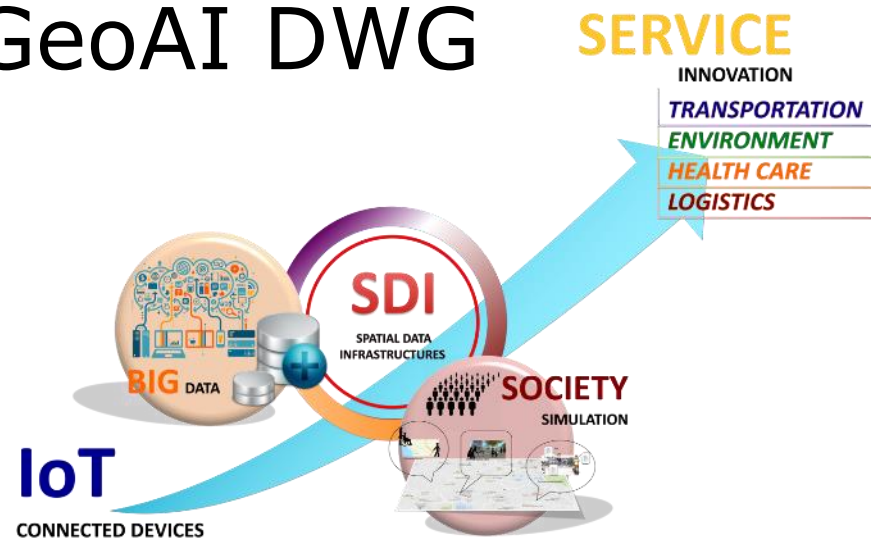
[Fadi Maali](#) (DERI)

[John Erickson](#) (Tetherless World Constellation (RPI))

### Participate:

# Geo Artificial Intelligence Even Smarter

## OGC GeoAI DWG



Build up disaster training dataset

- streaming data retrieve from traffic purpose CCTV

1 Annotation

- Event time stamp and annotation
- CCTV image retrieval
  - ✓ Regularly get CCTV image –
  - ✓ Event based CCTV image detection -> Automatic trigger after an earthquake

### 2 Training and Recognition

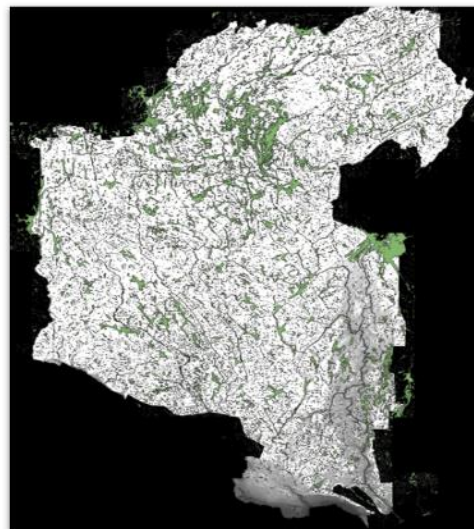
- CCTV streaming recognition based on annotation knowledge base
- Email, SMS, instant messenger notification



序号	摄像头名称	摄像头位置	摄像头类型	摄像头品牌	摄像头型号	摄像头分辨率	摄像头帧率	摄像头带宽	摄像头状态
1	北环路北段路口	北环路北段路口	CCTV	海康威视	DS-7E02D	1080P	30FPS	4Mbps	正常
2	北环路南段路口	北环路南段路口	CCTV	海康威视	DS-7E02D	1080P	30FPS	4Mbps	正常

## TB15 D104: Lake-river differentiation model

- One of the deliverables of ML thread of Testbed-15, sponsored by NRCan
- Objective: Train model to recommend waterbody splits into lake and river features
  - If no split, determine if lake or river
    - Detect lakes!**
  - If split, determine division between the features
    - Hydro - lakes = rivers!**
- Data
  - Hydrography network
  - High Resolution DEM
  - Imagery, if possible/necessary
- Study area
  - north of Gatineau/Ottawa
  - near from Petawawa experimental forest



How to **extract** and **integrate** knowledge within **3D point clouds** for **autonomous** decision-making systems



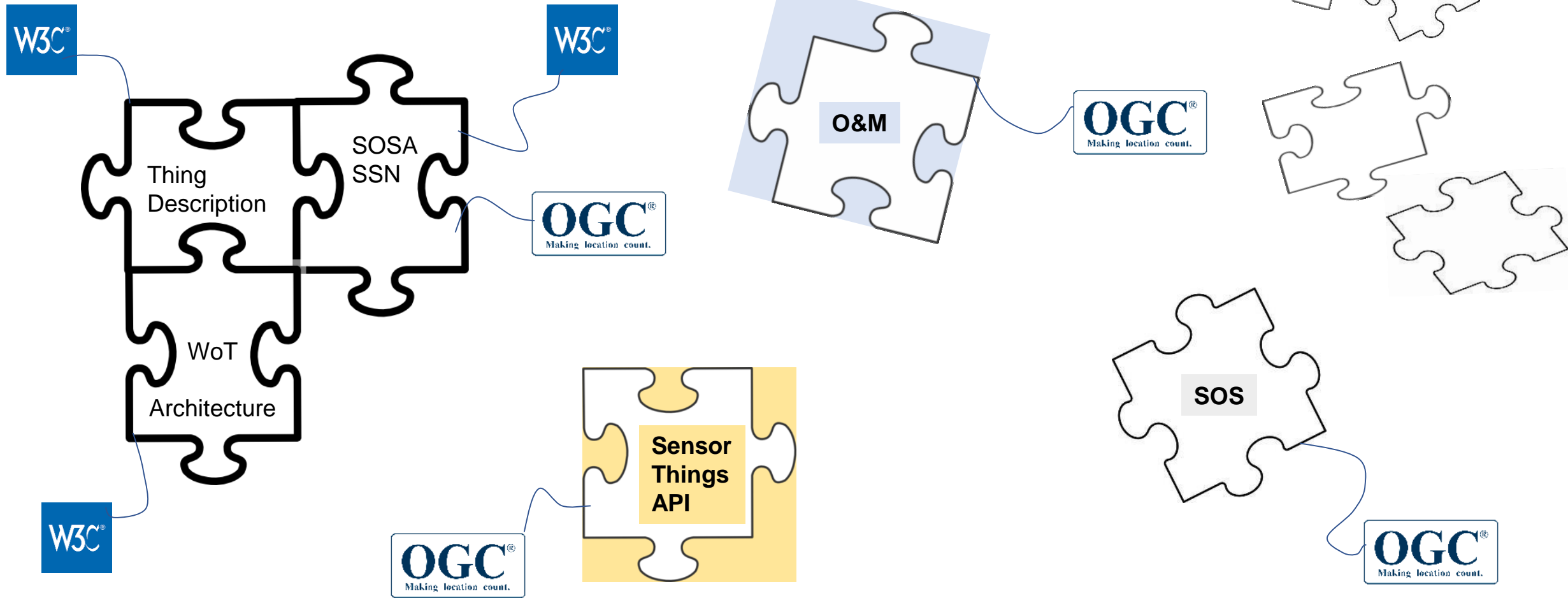


# Event type – Urban flash flood

- via traffic CCTV
- Road mark detection – puddles detection
- Flood depth recognition – detect the driveway splashing



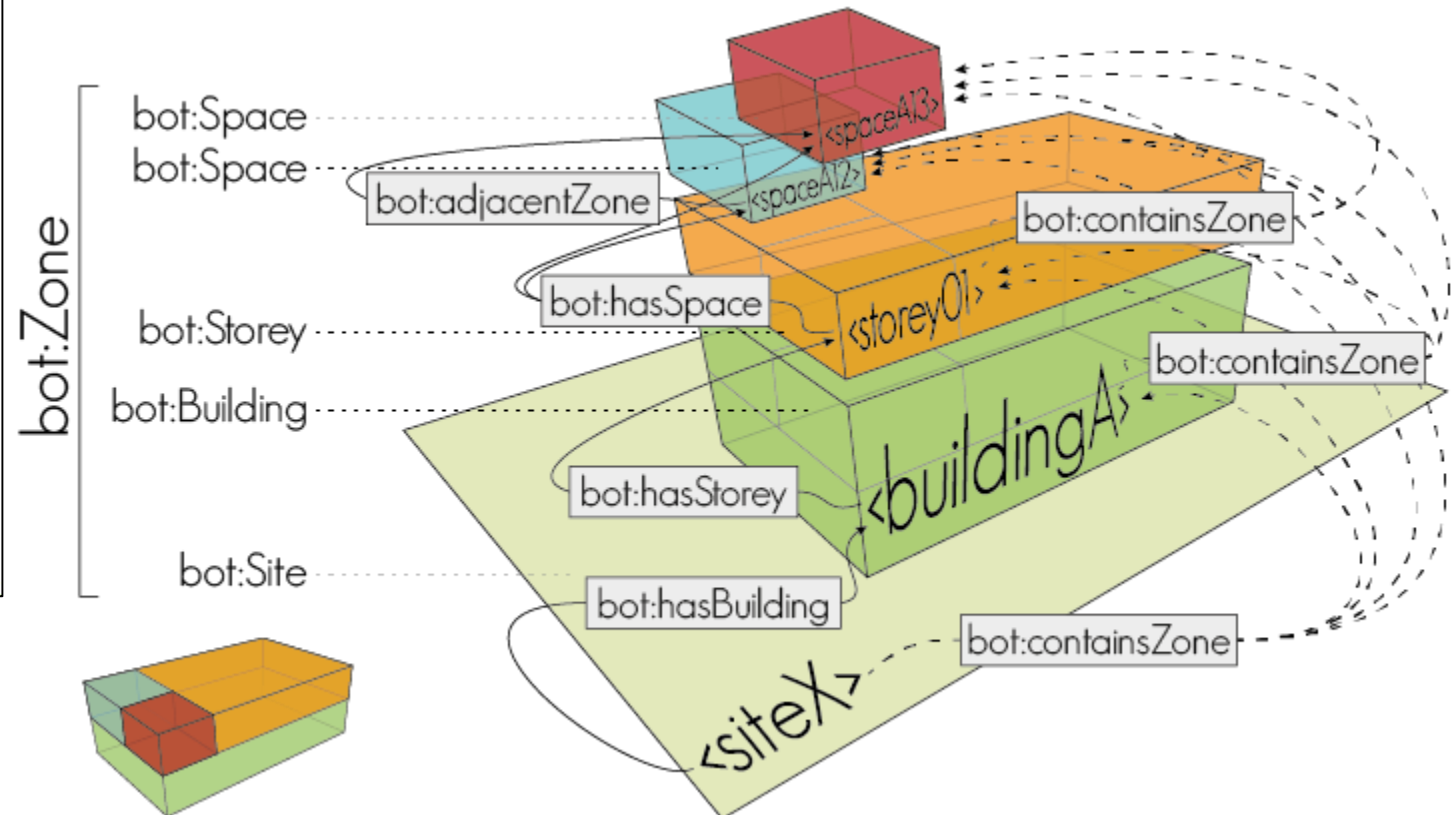
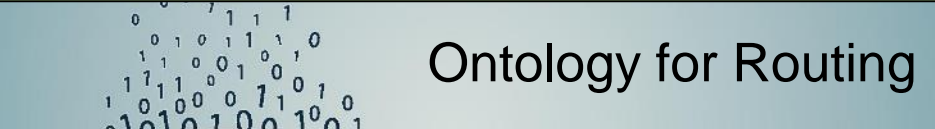
# Sensor Standards On The Rise





## Matching | Model to Instance

# Ontology for Routing



## Linked Building Ontology

# Geo, JSON & Linked Data Finally Meet



## Recursive Lists

```
{
  "@context": {
    "@vocab": "https://purl.org/geojson/vocab#",
    "type": "@type",
    "bbox": {"@container": "@list"},
    "coordinates": {"@container": "@list"}
  },
  "type": "Feature",
  "bbox": [-10.0, -10.0, 10.0, 10.0],
  "geometry": {
    "type": "Polygon",
    "coordinates": [
      [
        [-10.0, -10.0],
        [10.0, -10.0],
        [10.0, 10.0],
        [-10.0, 10.0]
      ]
    ]
  }
}
//...
```

JSON-LD 1.1

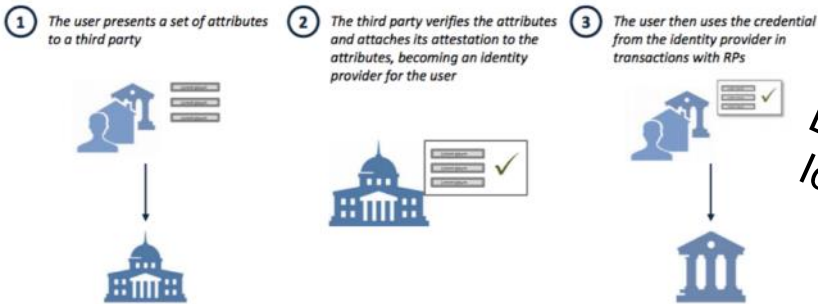
```
@prefix geojson: <https://purl.org/geojson/vocab#>.

[
  a geojson:Feature ;
  geojson:bbox (-1.0E1 -1.0E1 1.0E1 1.0E1) ;
  geojson:geometry [
    a geojson:Polygon ;
    geojson:coordinates (
      (-1.0E1 -1.0E1)
      (1.0E1 -1.0E1)
      (1.0E1 1.0E1)
      (-1.0E1 1.0E1)
    )
  ]
]
```



# More Web!

THE STRUCTURE OF IDENTITY SYSTEMS

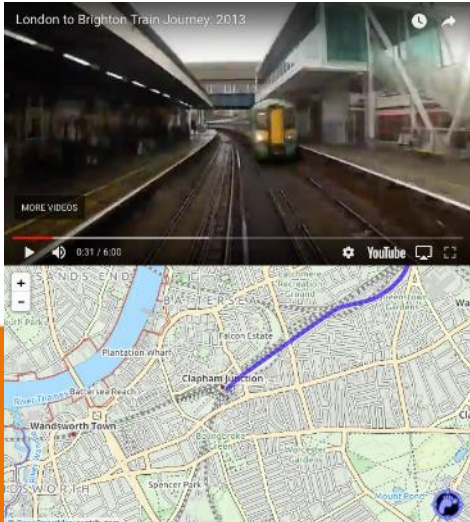
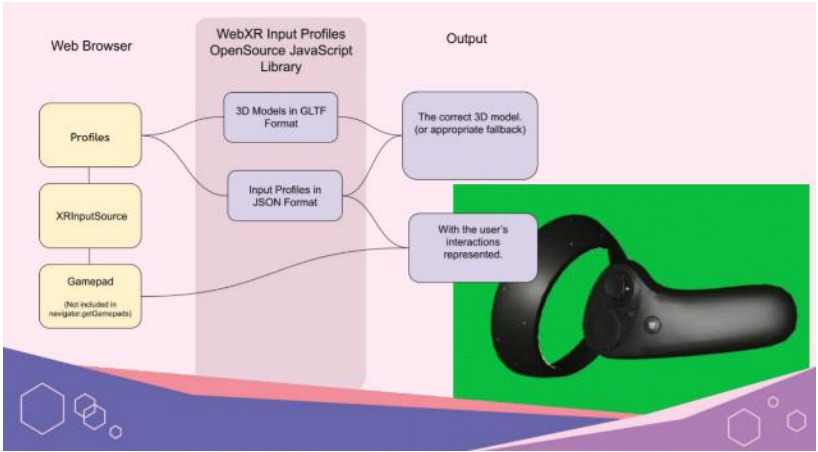


WORLD ECONOMIC FORUM | 2016

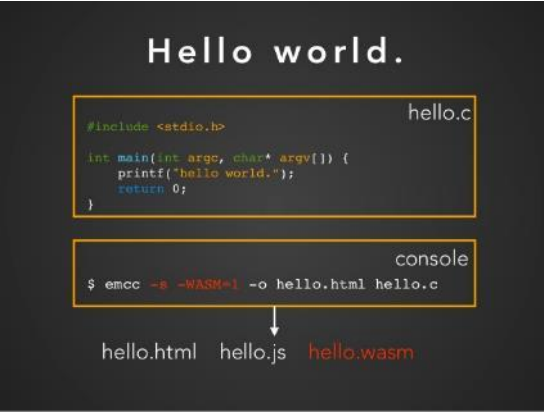
Identity on the  
Verifiable Claims  
Decentralized  
Identifiers

Immersive **Web** Assembly  
VR & AR

Maps - MapML



Video Map Tracks



SDI.Ne**xt**





# The story continues...

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