Open-source web frontend mot en esti backend?

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GeoDATA

#foss4gno #geomatikk

ArcGIS Online

GeoJSON

ArcGIS Server

- WMS
- WFS
- ArcGIS JSON!?

GeoJSON

```
"type" : "FeatureCollection",
"crs" :
 "type" : "name",
 "properties" :
    "name" : "EPSG:3857"
"features" : [
    "type" : "Feature",
    "geometry" :
      "type" : "Point",
      "coordinates" : [
       1190994.28194441, 8383648.65125157
    "properties" : {
     "TITLE" : "Punkt"
```

ArcGIS JSON

```
"objectIdFieldName" : "OBJECTID",
"globalIdFieldName" : "",
"geometryType" : "esriGeometryPoint",
"spatialReference" : {
  "wkid" : 102100,
  "latestWkid" : 3857
"fields" : [],
"features" : [
    "attributes" : {
      "TITLE" : "Punkt"
    "geometry" :
      "x" : 1190994.2819444125,
      "v" : 8383648.6512515731
    "attributes" : {
      "תַּדְתַּדְבָּ" • "בּיִבְּעָרָלָּדְיּ
```

terraformer.io

https://github.com/esri/terraformer

- MIT lisens
- Javascript geo-verktøykasse
- ArcGIS JSON GeoJSON WKT (Well Known Text)

Terraformer.io: Konvertere mellom formater

```
//parse ArcGIS geometri til GeoJSON
var point = Terraformer.ArcGIS.parse({
    "x":-122.6764,
    "y":45.5165,
    "spatialReference": {
        "wkid": 4326
    }
});
```



Hva med tjenester?

- Geoprosessering
- Geokoding
- Reverse geokoding
- Feature Services

geoservices-js

https://github.com/Esri/geoservices-js

geoservices-js

```
var Geoservices = require('geoservices');
var client = new Geoservices();
client.geocode({ text: "Schweigaardsgate 28, 0191 OSLO" }, function
  if (err) {
    console.error("ERROR: " + err);
} else {
    console.log("Resultat funnet her: " + result.locations[0].feature"
    result.locations[0].feature.geometry.x);
}
});
```

geoservices-js

```
var query params = {
 f: 'json',
 returnGeometry: true,
 where: '1=1',
 outSR: '4326'
};
var fs = client.featureservice( params , function(err, data) {
  fs.query( query params, function( err, result ) {
    if (err) {
      console.error("ERROR: " + err);
    } else {
      console.log("Features: ", result );
 });
});
```

Klienttriks

- XYZ
- Mapbox GL JS

Open Layers 3

- ol.format.EsriJSON
- ol.source.TileArcGISRest

Esri-leaflet

https://github.com/Esri/esri-leaflet

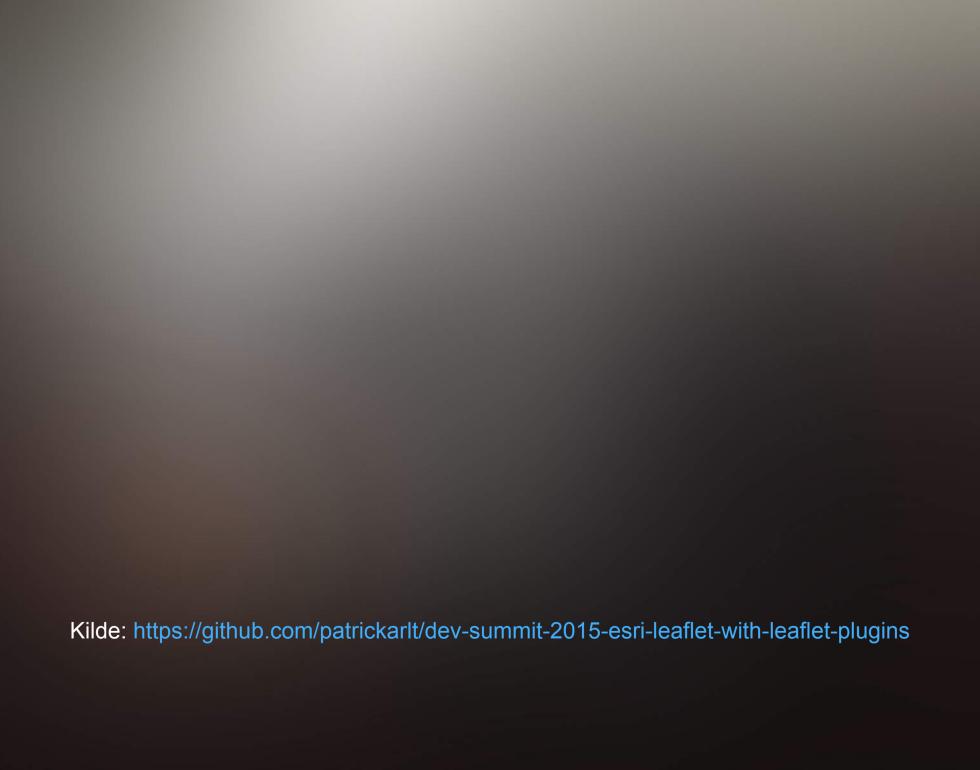
er en Leaflet plugin som også støtter esri-leaflet plugins

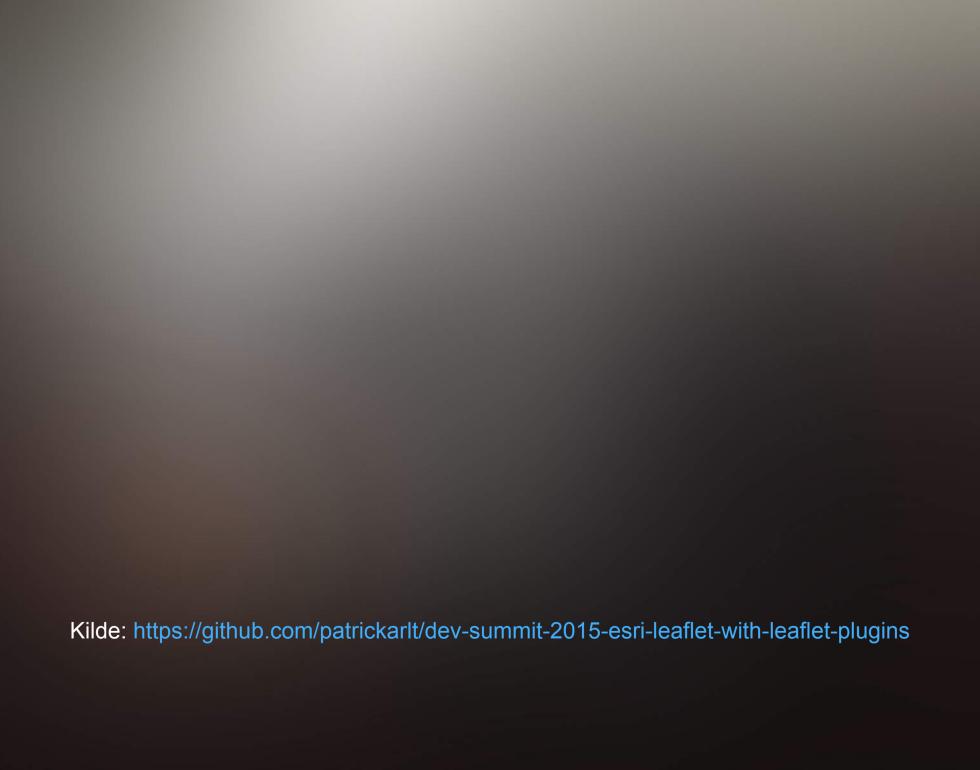
Esri-leaflet

- Fantastisk eksempelside med demoer
- Store brukergruppe og ivrige utviklere
- Norske tjenester kan kreve Proj4Leaflet-plugin

Esri-leaflet

```
L.esri.featureLayer({
    url: 'https://services.arcgis.com/rOo16HdIMeOBI4Mb/arcgis/rest/se
}).addTo(map);
```





Oppsummering

- Mye kan løses med direkte REST-kall
- terraformer.io for konvertering av formater
- geoservices-js
- Open Layers 3
- Esri-leaflet

Illustrasjonsfoto @ http://splitshire.com