



ESRI DEVELOPER SUMMIT 2023

# ArcGIS Maps SDK for JavaScript: Tips and Tricks for Developing and Debugging Apps

Emily Hu, Jose Banuelos,

Slides available:

[https://links.esri.com/tips-  
js-DS2023](https://links.esri.com/tips-js-DS2023)

```
const layer = view.map.allLayers.get(0);
view.whenLayerView(layer)
  .then(layerView => console.log(
    // If there were problems with the layer
    // catchableError:
    layerView.error))
```

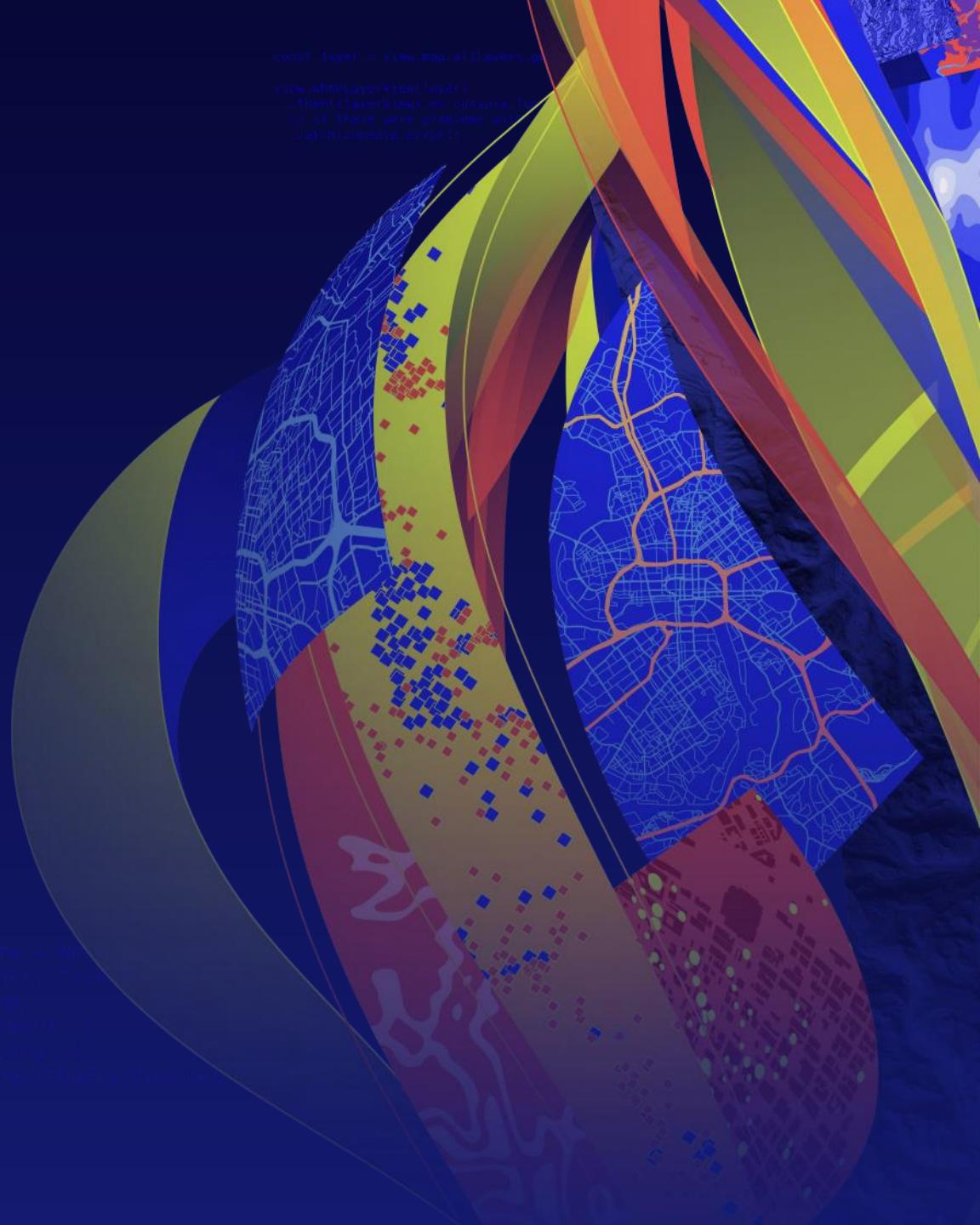
```
const view = new
  arcgisMap.MapView({
    map: map,
    container: "map",
    zoom: 10,
    center: [-122.1, 37.7],
    minZoom: 5,
    maxZoom: 15
  })
```

# Developing Tips and Tricks

Emily Hu

```
const layer = view.map.allLayers.get();
view.whenLayerView(layer)
  .then(layerView => console.log(
    // If there were problems with
    // catching errors:
```

```
const view = new
  ol.View({
    projection: 'EPSG:4326',
    center: [100, 0],
    zoom: 2
  });
view.on('error', error => {
  console.error(error);
});
```



# Developing Tips

- AMD vs ES Modules
- Live Expression
- Responsive App Development and Easy Styling

# Comparing AMD and ES Modules

- The ArcGIS Maps SDK for JavaScript is available as AMD and ES modules.

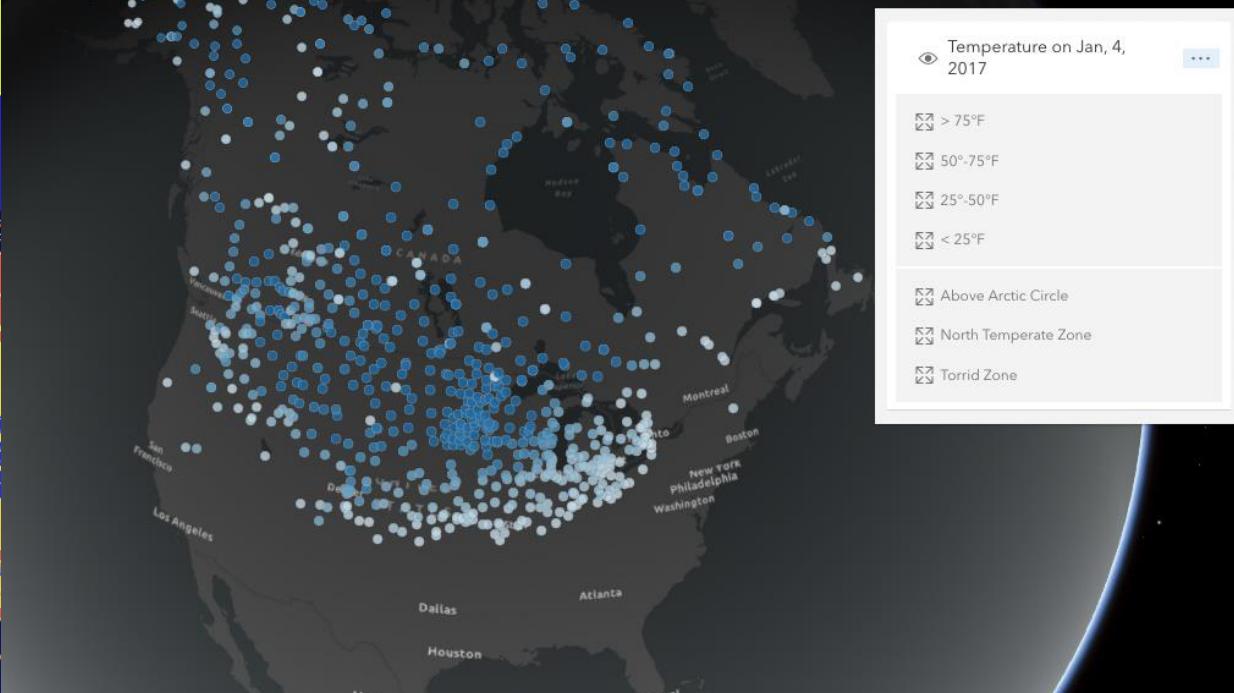
`require()`      `import`

	CDN (AMD)	CDN (ESM)	ESM local build	AMD local build
No installation, configuration or local build required	X	X		
Fast download performance via CDN	X			
For testing only		X		
Easy installation via <a href="#">npm</a>			X	
Seamless integration with most modern frameworks and build tools			X	
Using API version 4.17 or earlier with a framework or build tools				X
Using Dojo 1 or RequireJS				X

- More sample using ES Modules in 4.26

*More in [Intro to Tooling](#)*

```
const view = new SceneView({  
  container: "viewDiv",  
  map: map,  
  environment: {  
    lighting: {  
      directShadowsEnabled: true  
    }  
  }  
})
```



# Live Expression

## Emily Hu

```
map.allLayers.getItemAt(index);  
layer  
  console.log(layerView)  
  // If you try to interact with the layerView, you'll get an error here.
```

```
const view = new SceneView({  
  container: "viewDiv",  
  map: map,  
  environment: {  
    lighting: {  
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    }  
  }  
})
```

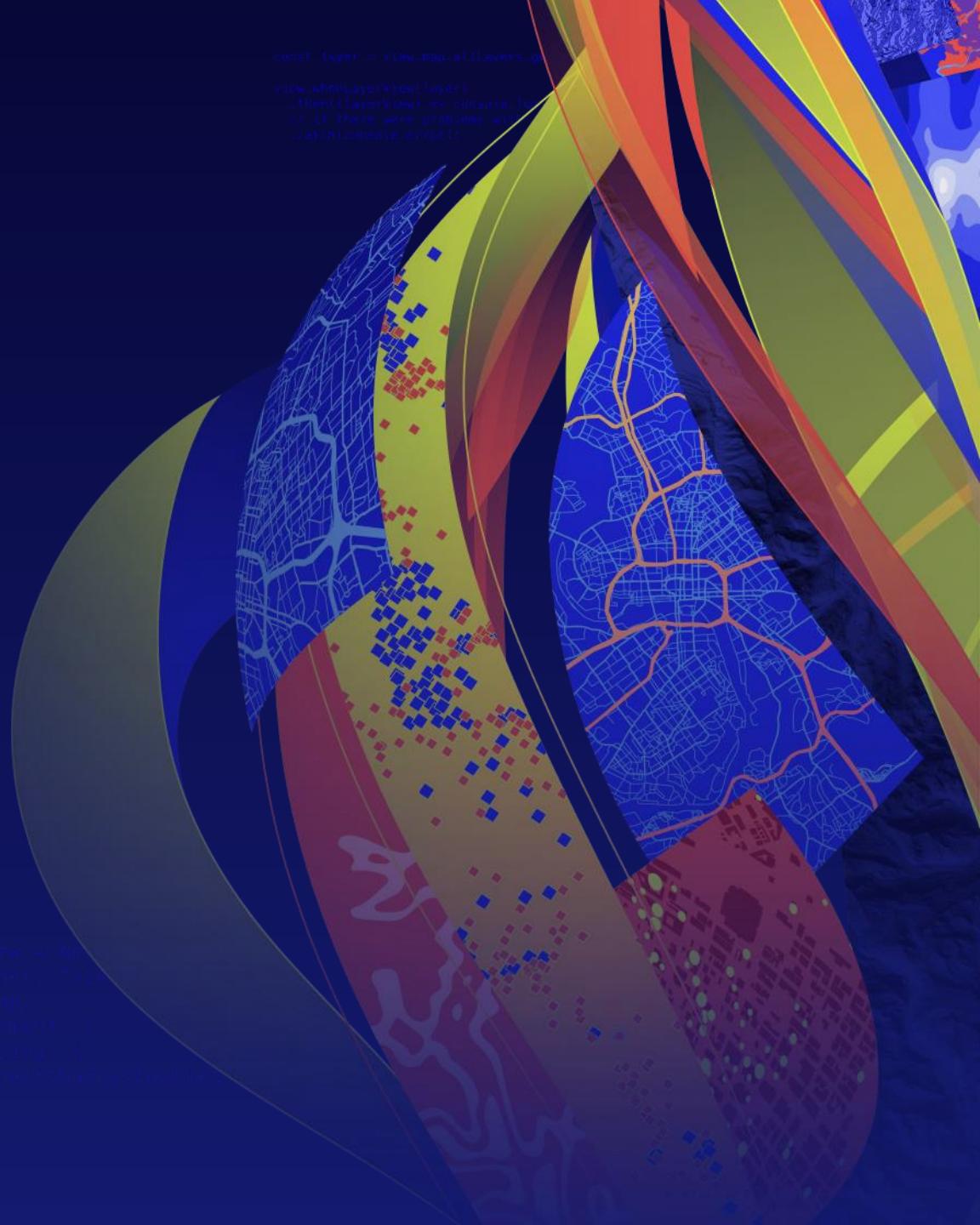


# Responsive & Style

Emily Hu

# Debugging Tips

Jose Banuelos



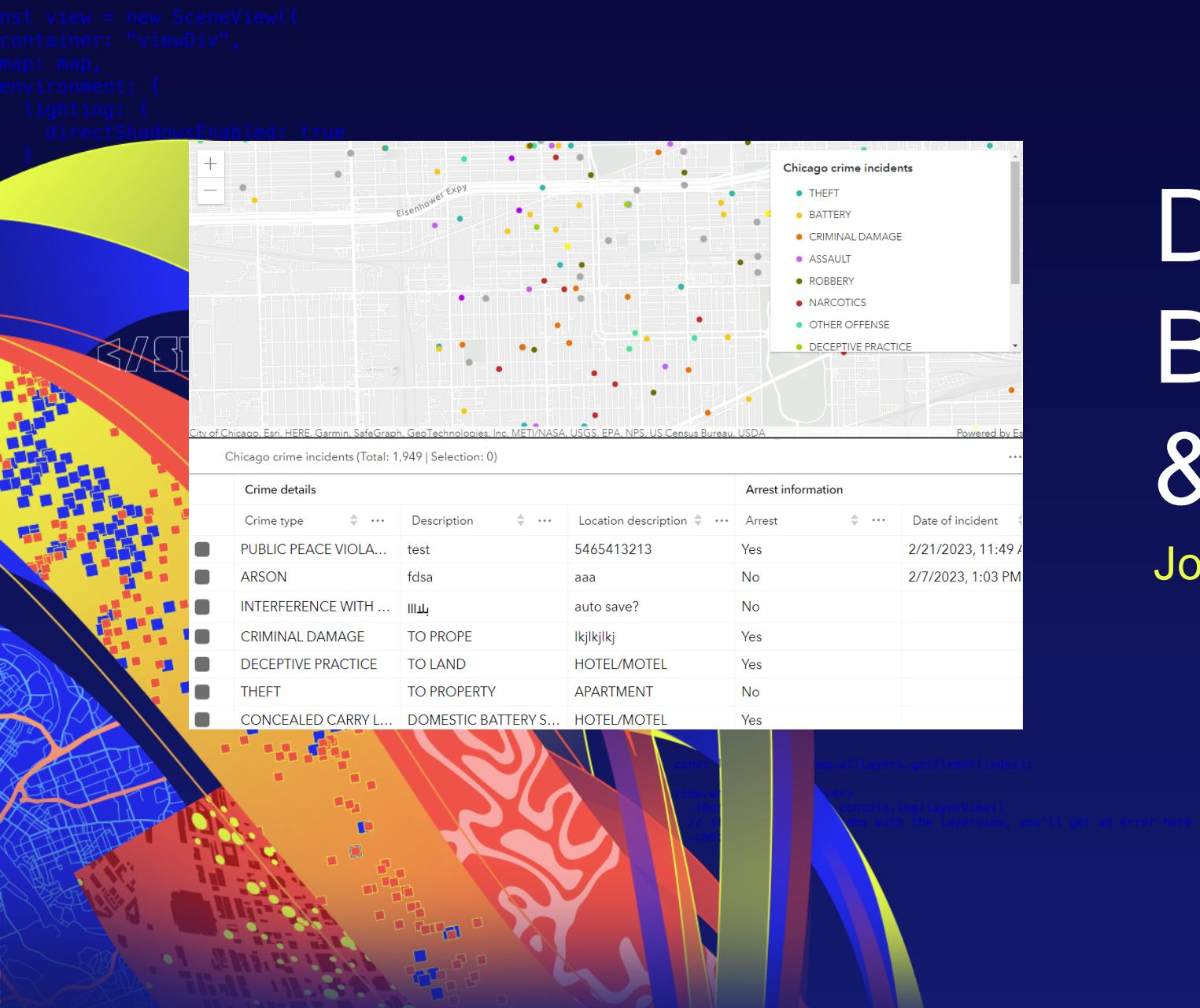
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  .then(layerView => console.log(
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    // catching errors:
```

```
const view = new MapView({
  container: "map",
  map: "map",
  zoom: 10,
  center: [-118, 34]
});
```

```
const layer = view.map.allLayers.get();
view.whenLayerView(layer)
  .then(layerView => console.log(
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```

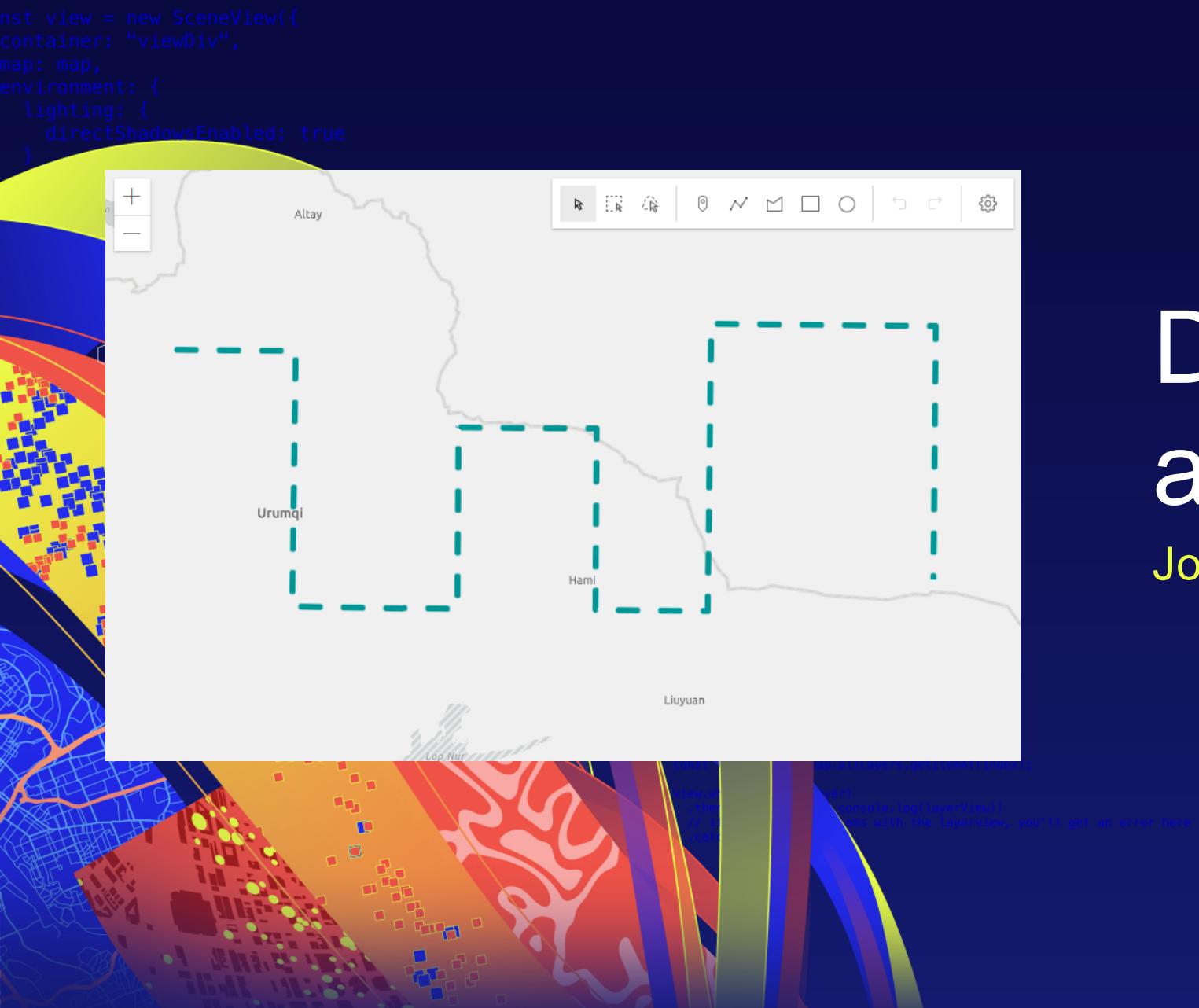
# Using the developer tools

- Breakpoints
  - Pause JavaScript code
  - Breakpoint, Logpoint, Conditional breakpoint
- Watch properties
- Use Developer tools as an IDE
- Sensors
  - Testing different locales



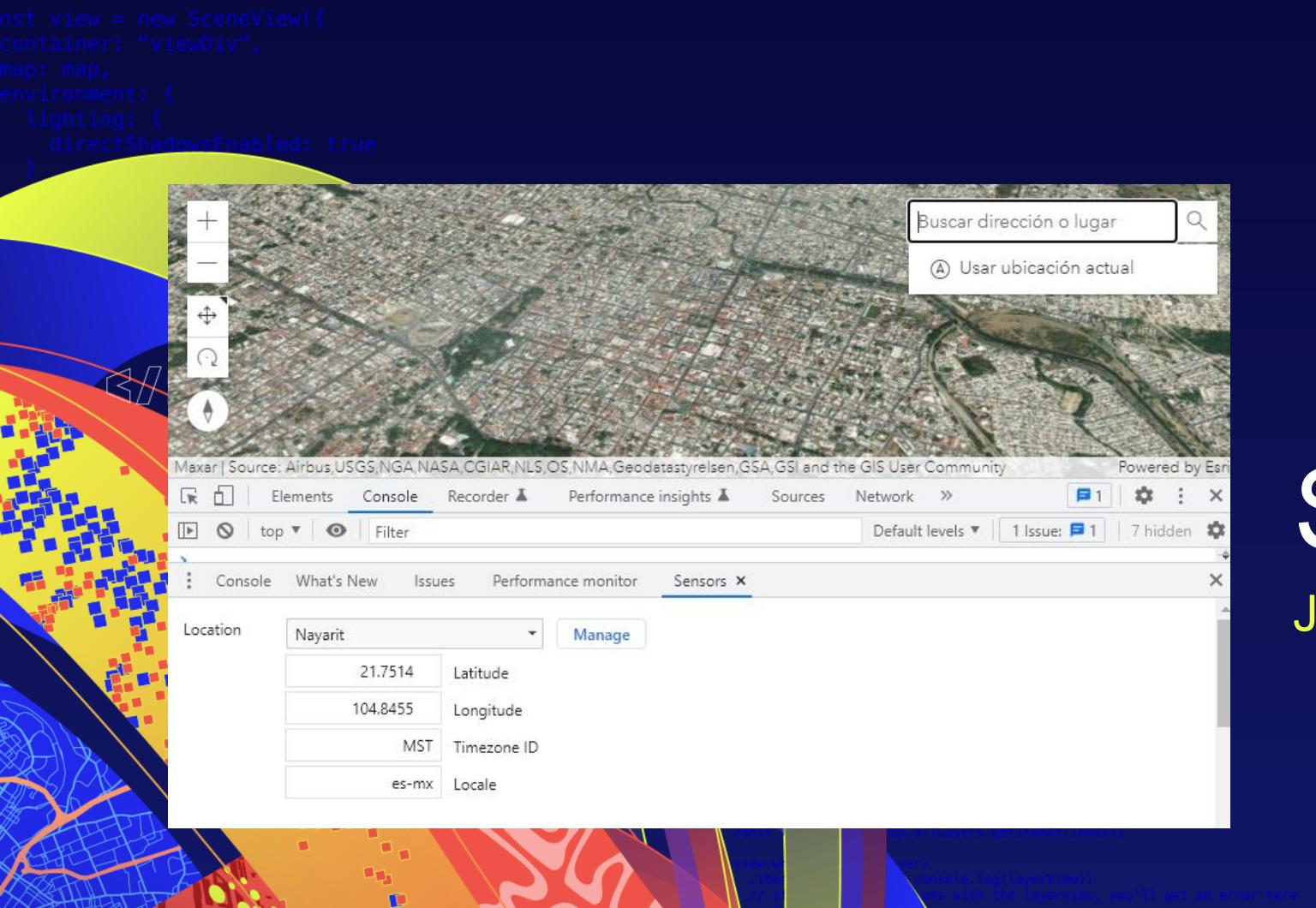
# Different Breakpoints & Watch

Jose Banuelos



# Developer Tools as an IDE

Jose Banuelos



# Sensors

## Jose Banuelos

Slides available:

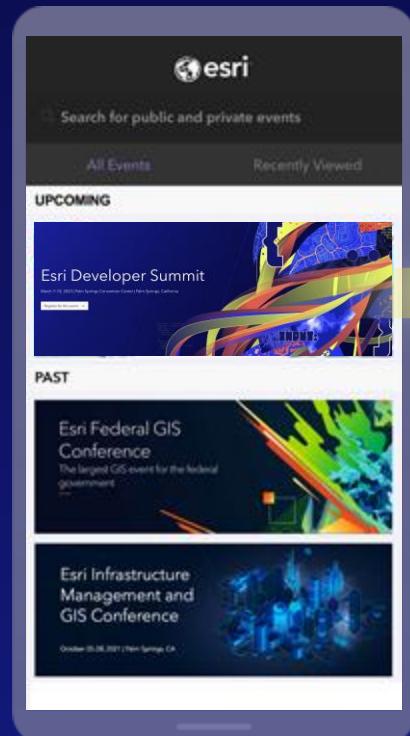
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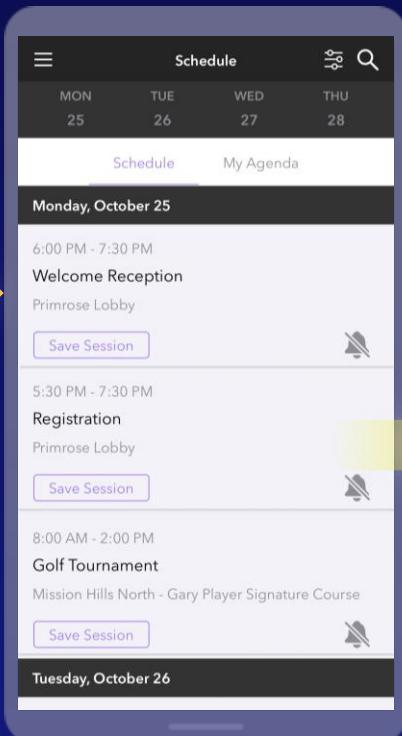
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    container: "map",
    zoom: 10,
    center: [-122.1, 37.7],
    minZoom: 5,
    maxZoom: 15
  })
```

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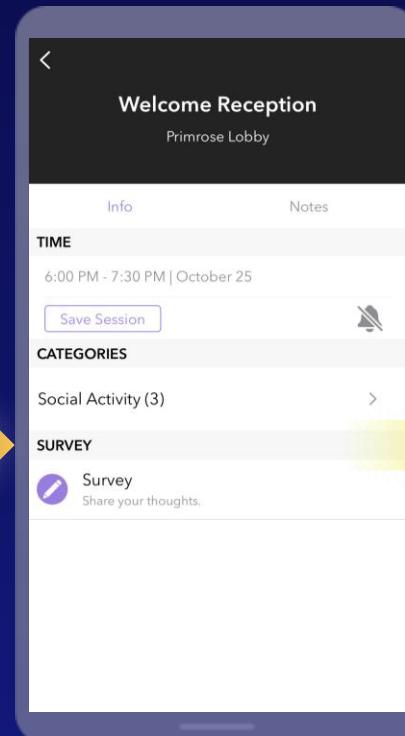
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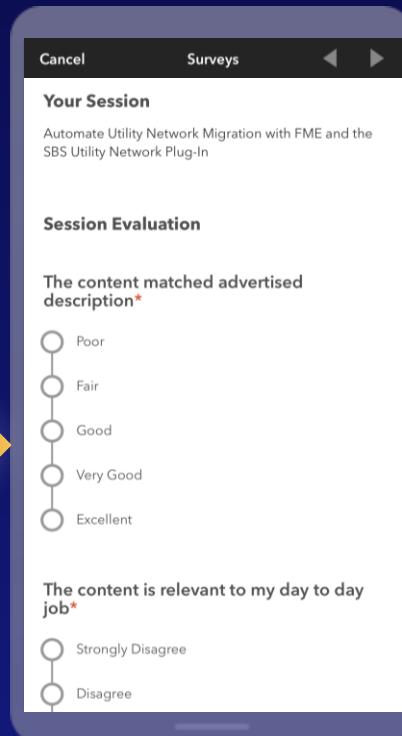
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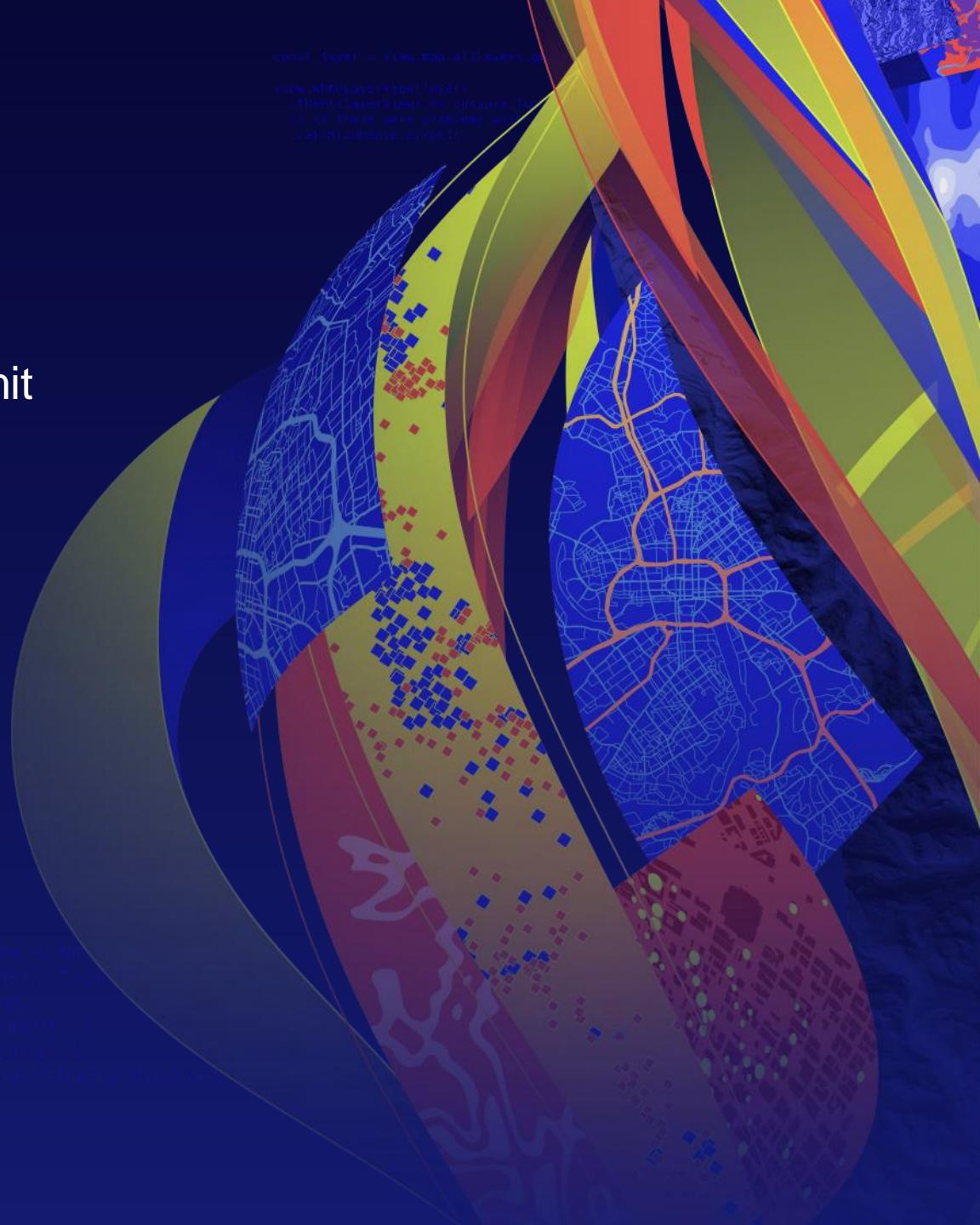


[github.com/EsriDevSummit](https://github.com/EsriDevSummit)



[links.esri.com/EsriDevCommunity](https://links.esri.com/EsriDevCommunity)

```
const layer = view.map.allLayers.get(0);
view.whenLayerView(layer)
  .then(layerView => console.log(''))
  // If there were problems with the layer
  .catch(error => console.error(error))
```



```
const view = new MapView({
  container: "map",
  map: "arcgis-streets",
  zoom: 10,
  center: [-122.33, 37.77]
});

const layer = view.map.allLayers.get(0);
view.whenLayerView(layer)
  .then(layerView => console.log(''))
  // If there were problems with the layer
  .catch(error => console.error(error))
```



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