



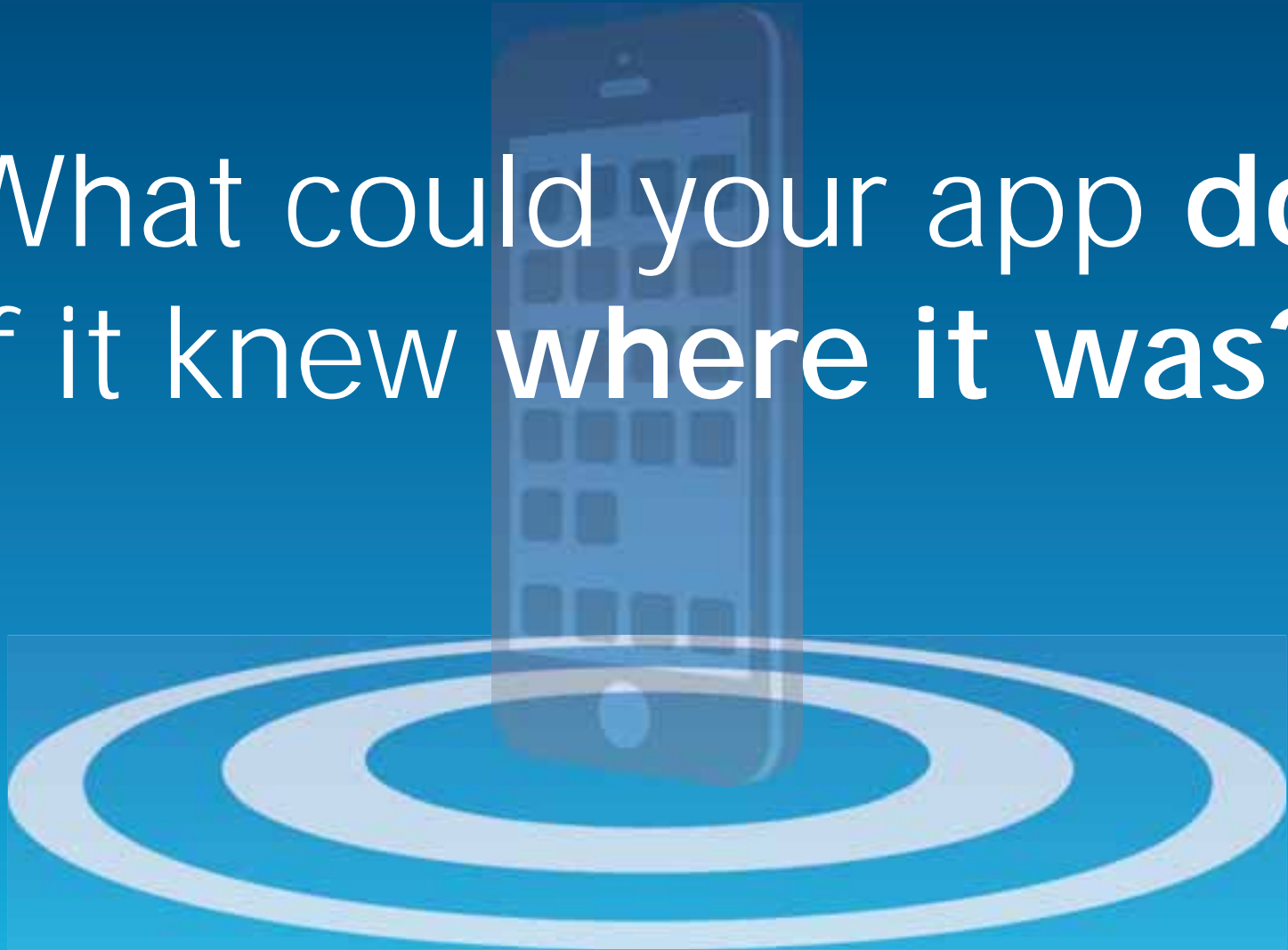
# Intro to the ArcGIS Geotrigger Service

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Esri Developer Summit  
Middle East & Africa

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Park Hyatt Dubai

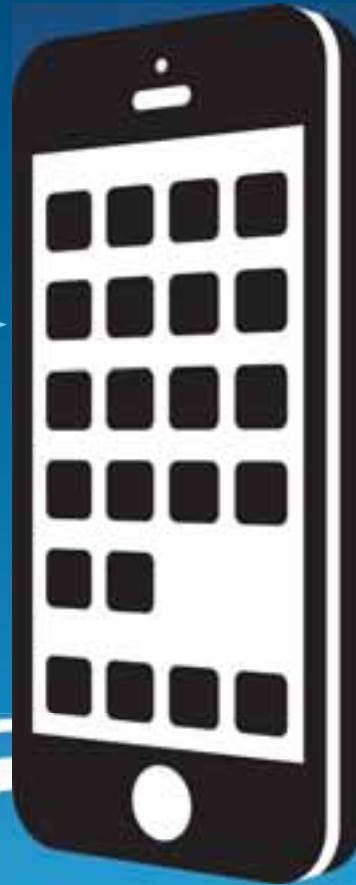
What could your app do  
if it knew **where it was?**



# Geotrigger: An Invisible Button



message

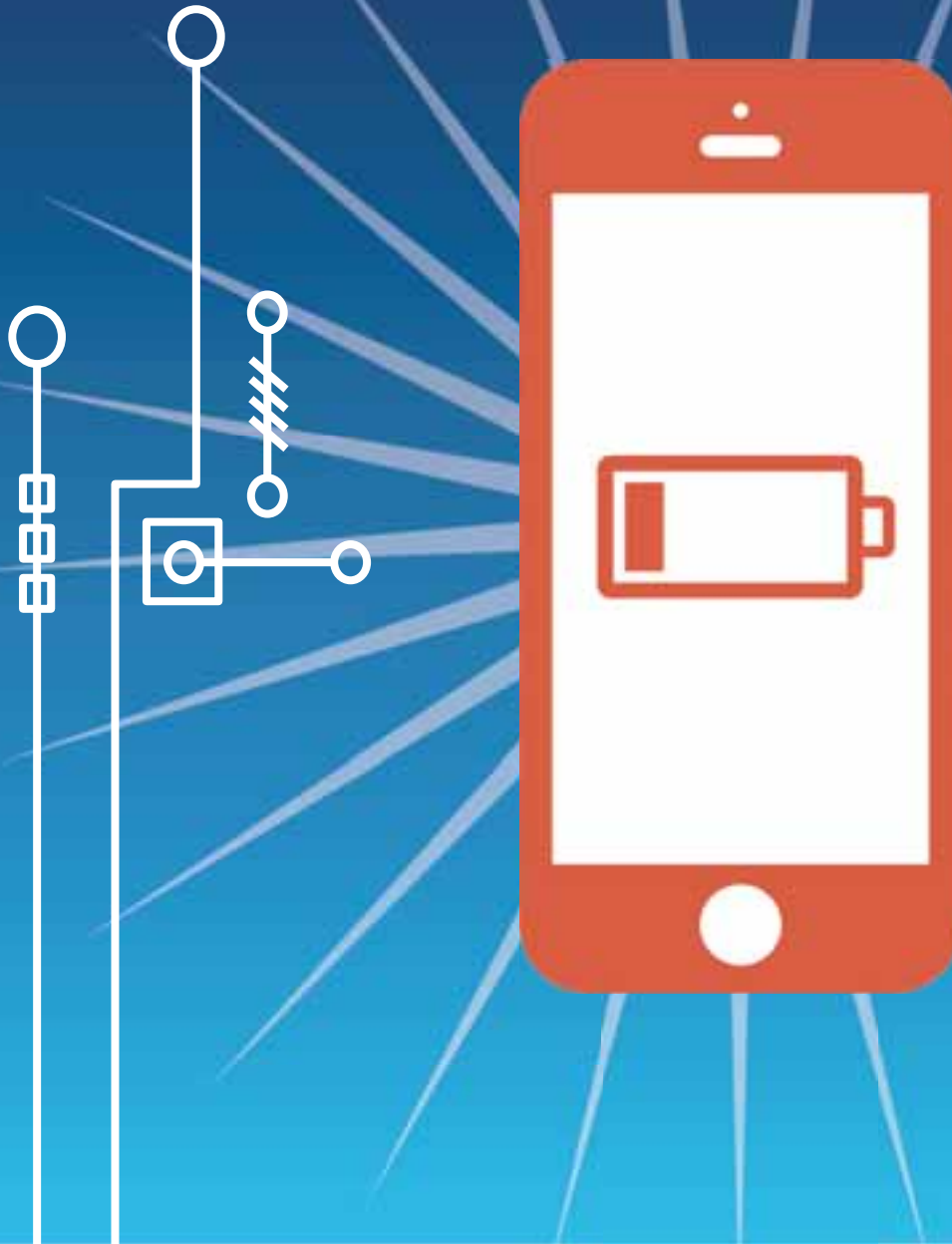


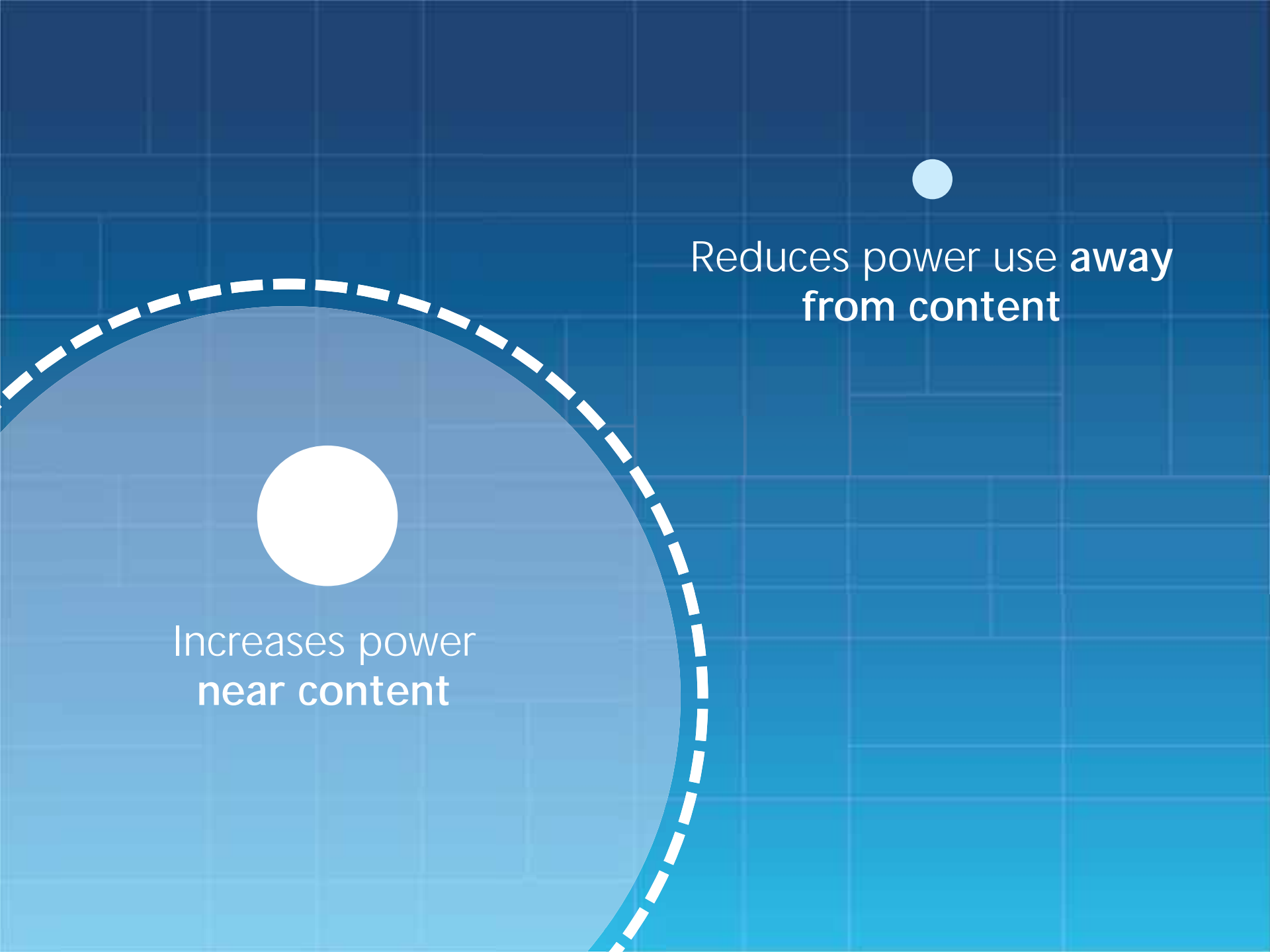


# Use Cases



What about  
**Battery  
Drain?**





Increases power  
near content

Reduces power use **away**  
from content



# Home Automation

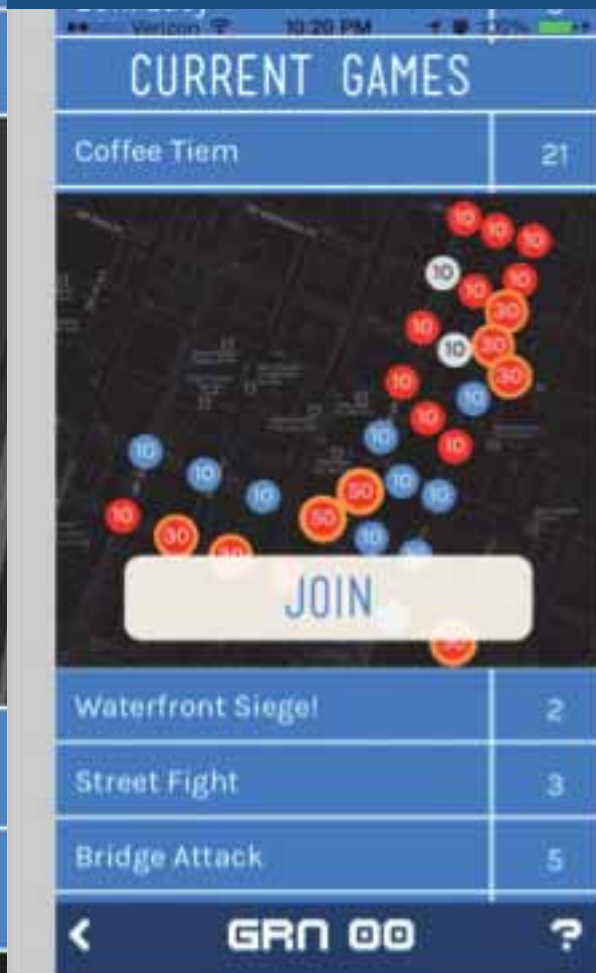
When you get home, your lights turn on!

When you leave the house, your lights turn off!



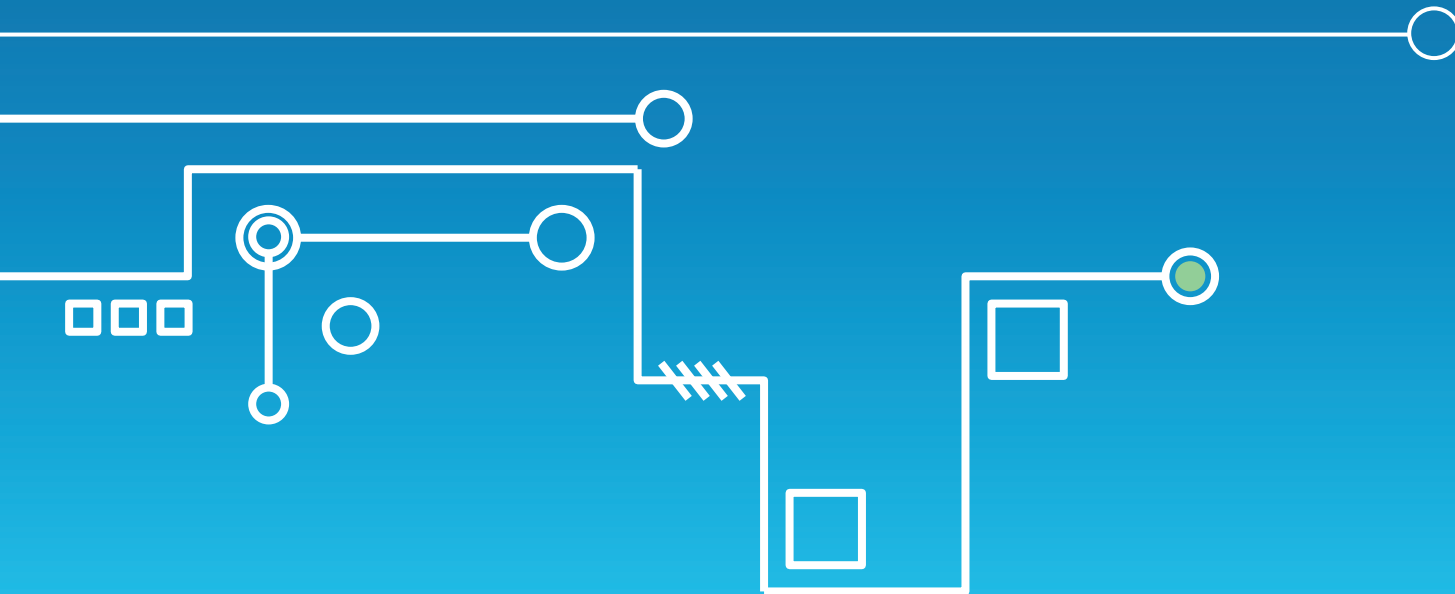


Real-time location-based gaming



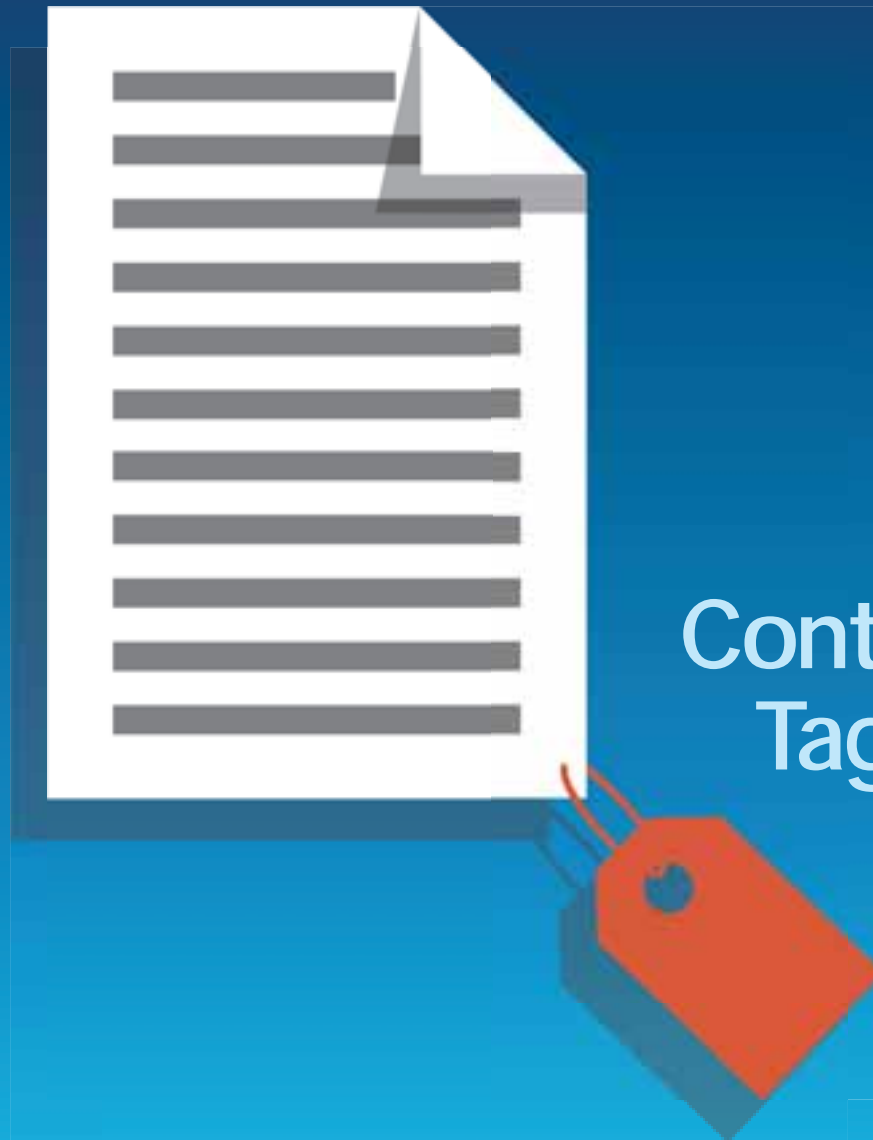
# Geotrigger Technology

- Mobile SDKs
- Web APIs
- Battery Management
- Tracking Profiles



# Geotrigger Components

- **Condition** (area) Polygon
- **Action** (can be a message or a callback URL)
- **Tags** (to group content)
  - Example: Wikipedia article data
  - Tags for Buildings, History
  - Can allow users to subscribe to a subset of the data



Content  
Tags



# Polygon Geotriggers

List (10)

South Waterfront

TAGS: neighborhood

Downtown

TAGS: 1st St

id: 1a2412edf1982e6b635ebd9f1679e9ee

Portland State University

TAGS: atdfl

id: 314501f8b9369ce08374a377f7292da

Oldtown Chinatown

TAGS: hoods

id: 156d51f21061c82b3479ab96348650f

the Pearl

TAGS: hoods

id: a5ac008eee8529a8a466c5a2acc72fbf

21st Ave District


TAGS: hoods

id: 3c6c4725e1726153240635740c9fb34d

Goose Hollow

TAGS: hoods

id: 73b59066cef1d805063734e85e194707



# Visual Geotrigger Editor





# Visual Geotrigger Editor

<

Edit

×

When a device tagged...

hoods

enters

a 836m radius around 45.5414, -122.6738

send a notification to the device with...

a message:

Welcome to Lower Albina

+ a URL

+ some data

+ an icon

+ a sound

+ post to a callback URL

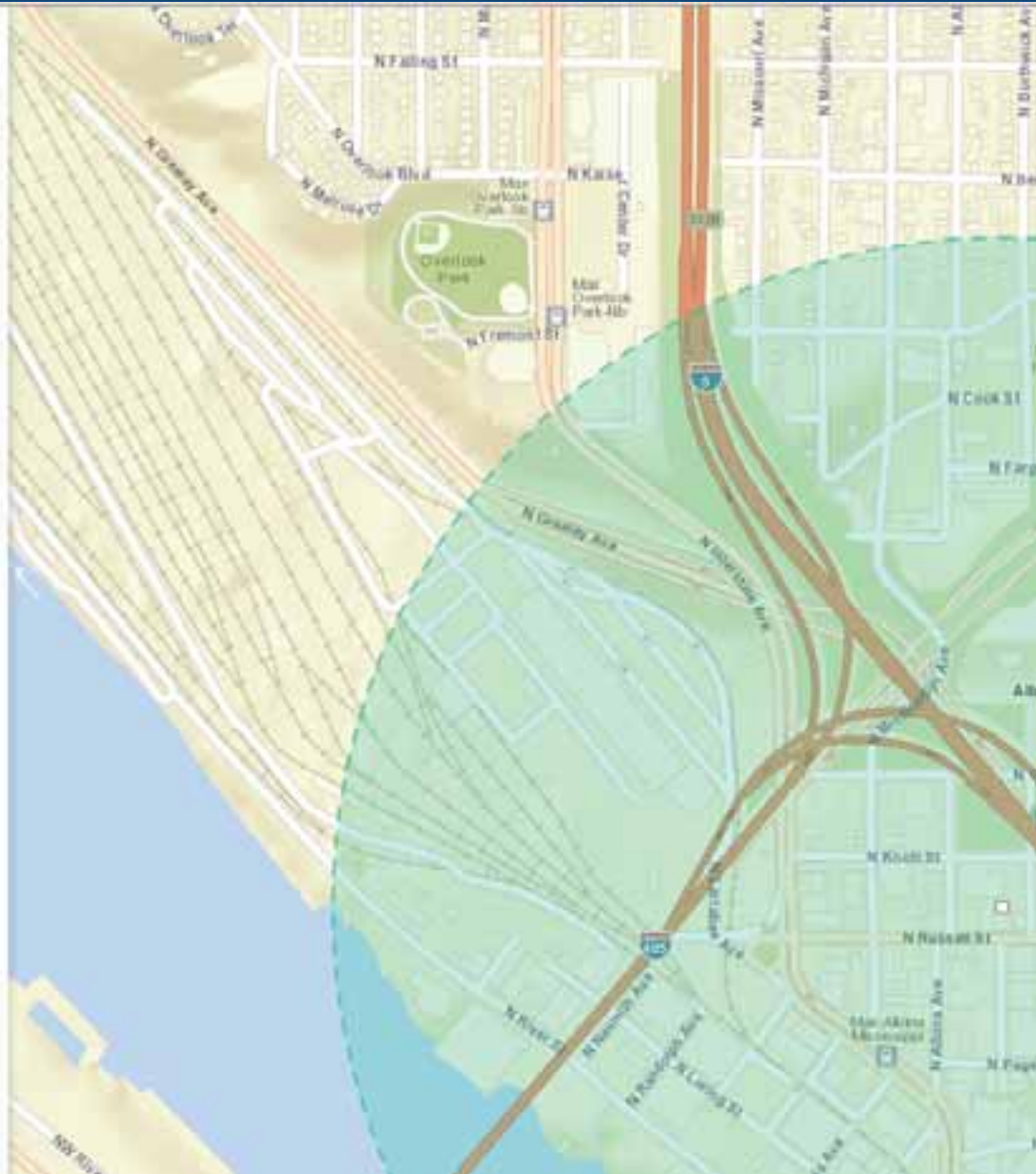
+ change the tracking profile

Title

Lower Albina

Cancel

Update



# Visual Geotrigger Editor

When a device tagged..

airports

enters



a polygon around 25.2518, 55.3672

send a notification to the device with..



a message:

message



+ a URL

+ some data

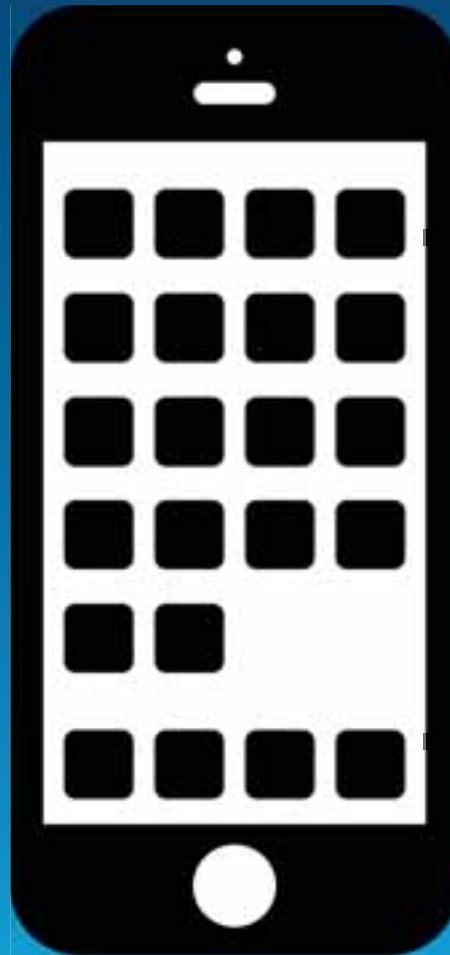
+ an icon

+ a sound

+ post to a callback URL

+ change the tracking profile

**Rough  
Mode**



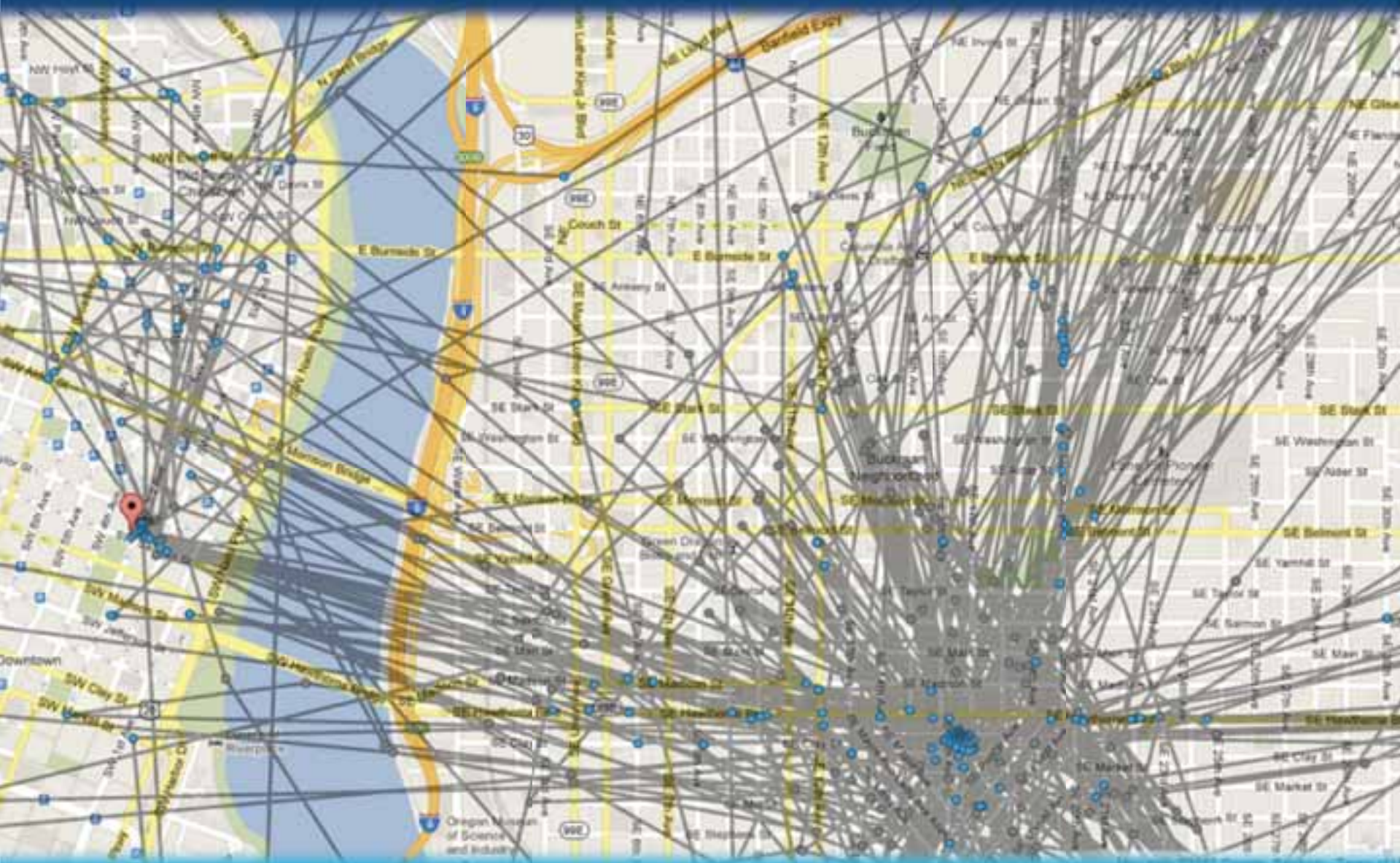
**Delayed  
Messaging**



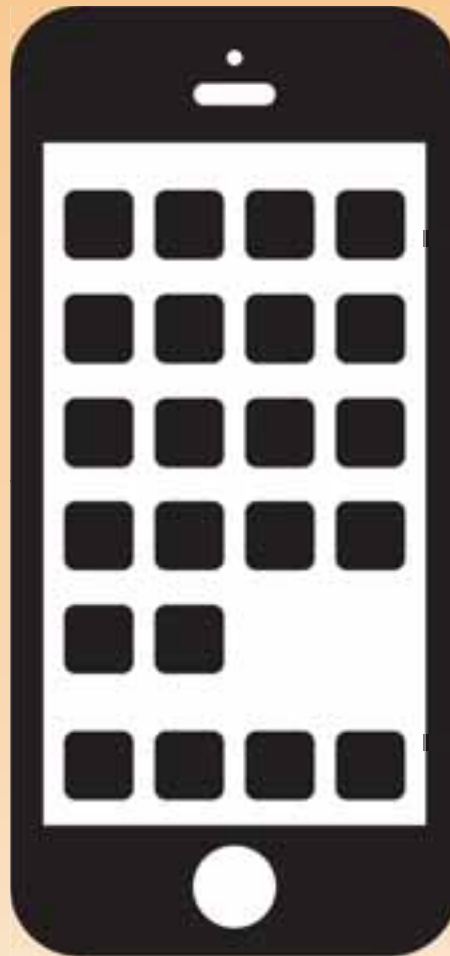
**Least Battery  
Drain**



# Data collected by one device in rough mode



## Adaptive Mode

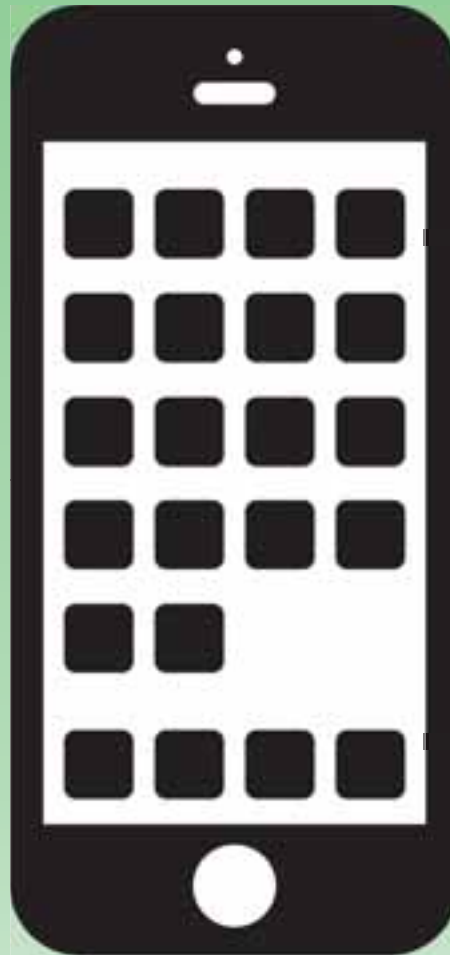


Fast  
Messaging



Minimal  
Drain

**Fine  
Mode**



**Fastest  
Messaging**



**Most Battery  
Drain**





Data collected by one device in  
real-time mode  
2.5 million points since 2008



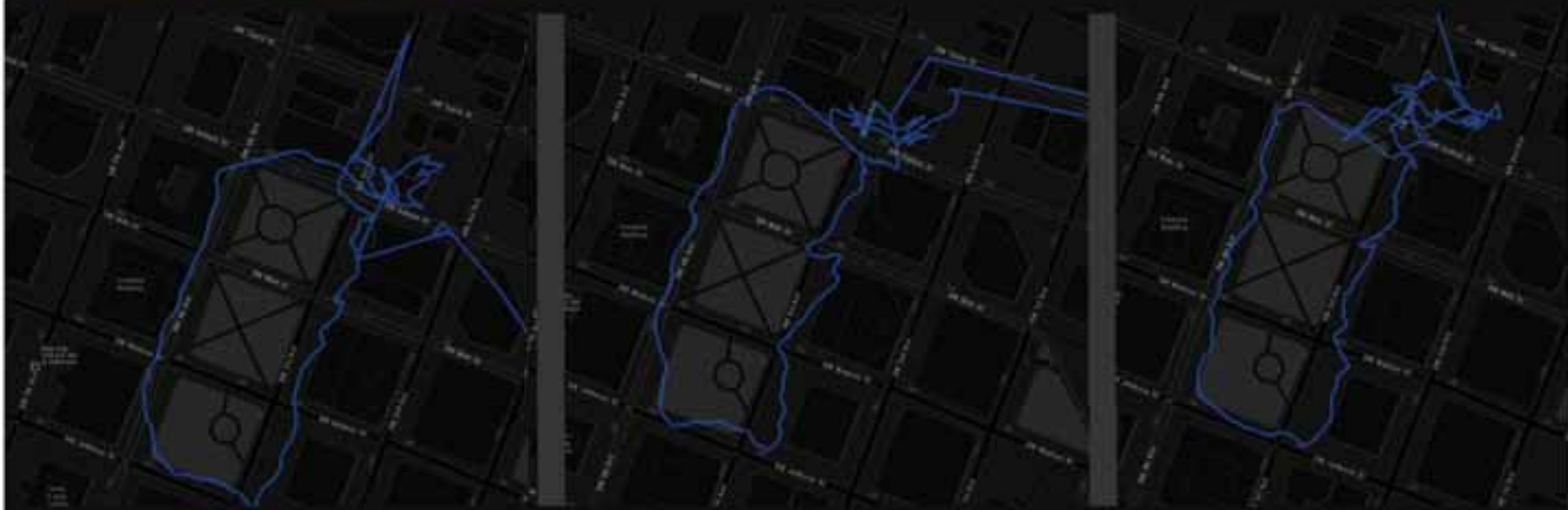


# March 2011: iPhone 3GS, 4



# Nov 2013: iPhone 4s, 5, 5S

iPhone GPS Comparison



iPhone 4S

iPhone 5

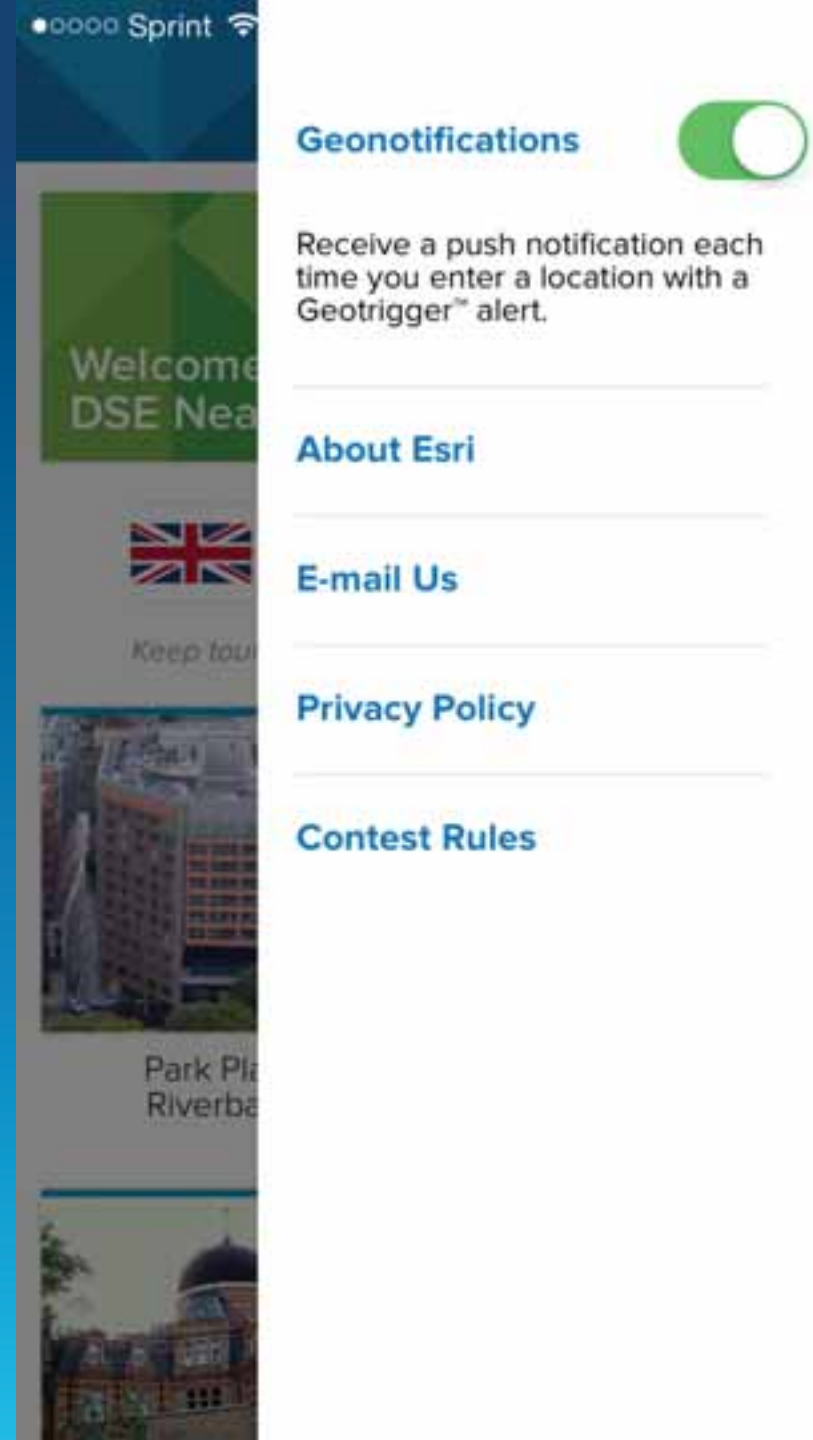
iPhone 5S

# Mobile App Privacy

We can  
do better  
than **this**:



# Consolidate and simplify settings and permissions





## Present privacy controls at the point of content creation.

- Instagram, Facebook, Foursquare do this well.
- Expose privacy controls with every piece of content that can be created or shared in a given system.



Location should be just one part of your app

- AMP Energy Drink app was a game first, and used location to enhance the experience

# No one is perfect

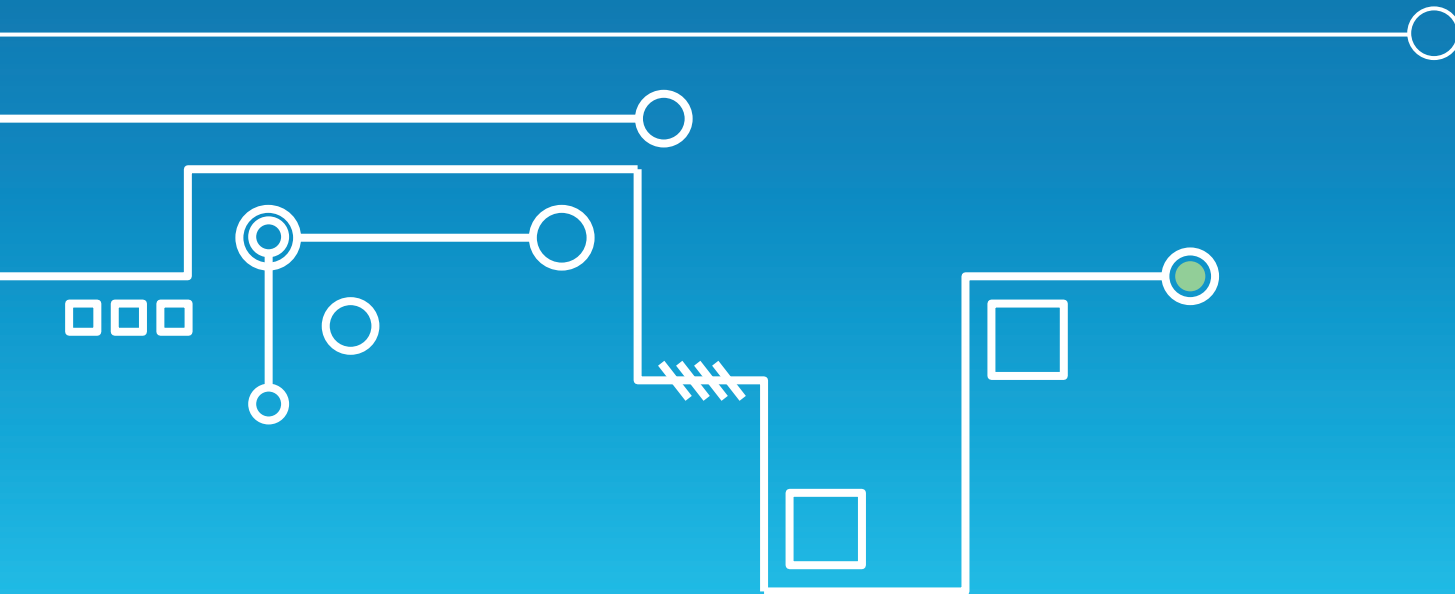
- Hosting user data is a **privilege**, not a right.
- Apologize **immediately** when you screw up, and fix the problem immediately.
- Always give users **something in return** for giving up their data.





# Geotrigger SDKs and API Available tomorrow!

**[developers.arcgis.com](https://developers.arcgis.com)**



# ArcGIS Geotrigger Service

[Home](#)[Guide](#)[API Reference](#)[Android Reference](#)[iOS Reference](#)

## Geotrigger Service

The Geotrigger Service is a cloud-hosted geofencing platform. Send push notifications or notify a remote server when a device enters, dwells or exits a specific geographic area.

The service automatically manages a device's battery life while using location services, so your users can run the app all day without significant battery drain.

[CORE CONCEPTS](#)

## iOS Geotrigger SDK

The iOS Geotrigger SDK is a wrapper around iOS's native location services that helps preserve battery life and uploads device location to the Geotrigger API.

[GET STARTED](#)[DOWNLOAD SDK](#)

## Android Geotrigger SDK

The Android Geotrigger SDK provides is a wrapper around Android's native location services that helps preserve battery life and uploads device location to the Geotrigger API.

[GET STARTED](#)[SAMPLE APP](#)

[developers.arcgis.com](https://developers.arcgis.com)

# Thank you!

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