



# AR Birthday

By Pratik Parmar



# Necessary links

<http://tiny.cc/czwebxr>



# Surprise on Birthday?



# Wish birthday using AR?



# Something like this?





# How?



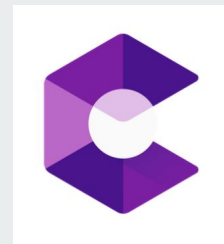
# Available options?



ARKit by Apple



AR.js



ARCore by Google



vuforia™








AR.js



- **Very Fast**
- **Web-based**
- **Open Source**
- **Standards**

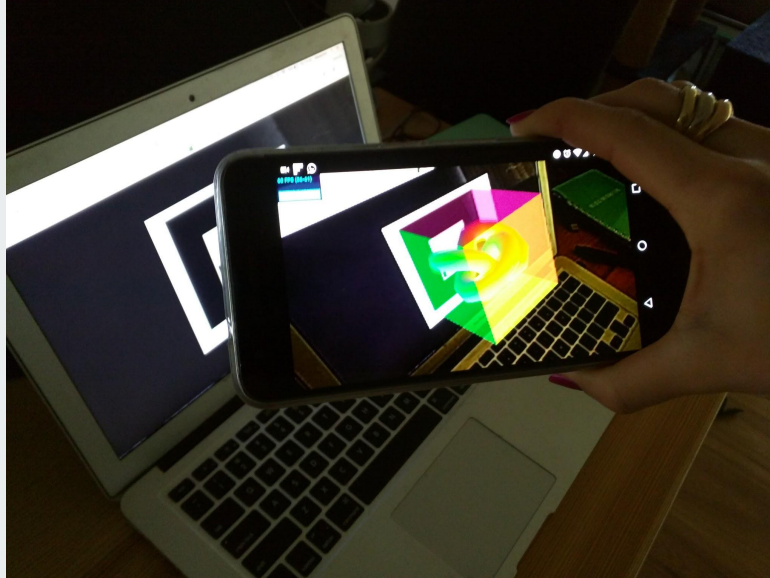


**Wanna try?**

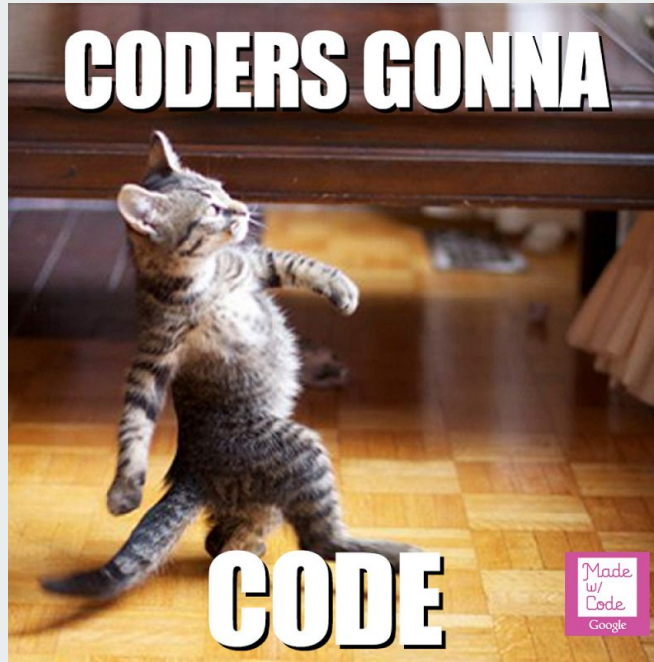
- 
- Open hiro marker <http://tiny.cc/hiromarker> in your laptop and save it
  - Open <http://tiny.cc/arjsdemo> in your phone browser and point it to your desktop screen


---

# You should see something like this



**Give some space because**






```
<!doctype HTML>
<html>
  <head>
    <title>HBD Aneri</title>
    <script src="https://aframe.io/releases/0.8.0/aframe.min.js"></script>
    <script src="https://cdn.rawgit.com/jeromeetienne/AR.js/1.5.0/aframe/build/aframe-ar.js"></script>
  </head>

  <body style='margin : 0px; overflow: hidden;'>
    <a-scene embedded arjs='sourceType: webcam;'>

      <a-marker-camera preset='hiro'>
        <a-box position='0 0.5 0' material='opacity: 0.5;'></a-box>
        <a-sphere position="0 0.25 0" radius="0.25" color="#EF2D5E" shadow></a-sphere>
      </a-marker-camera>
    </a-scene>
  </body>
</html>
```



Make sure you've added  
**https://** at the beginning of URL  
( [https://pratik\\_pintu.glitch.me](https://pratik_pintu.glitch.me) )





# Back to birthday project



# Add Text

Hello Mozilla

Hiro

ASUS

trackingBackend : artoolkit  
[Share on augmented-websites](#)

markersAreaEnabled :false





```
<!doctype HTML>
<html>
  <head>
    <title>Hello Mozilla</title>
    <script src="https://aframe.io/releases/0.8.0/aframe.min.js"></script>
    <script src="https://cdn.rawgit.com/jeromeetienne/AR.js/1.5.0/aframe/build/aframe-ar.js"></script>
    <script src="https://unpkg.com/aframe-text-geometry-component@^0.5.0/dist/aframe-text-geometry-component.min.js"></script>
  </head>

  <body style="margin : 0px; overflow: hidden;">
    <a-scene embedded arjs="sourceType: webcam;">
      <a-entity rotation="-120 0 0">
        <a-entity
          position="-1 0.1 0"
          material="color: red"
          scale="0.5 0.5 0.5"
          text-geometry="value: Hello Mozilla">
        </a-entity>
      </a-entity>
      <a-marker-camera preset="hiro"></a-marker-camera>
    </a-scene>
  </body>
</html>
```




# Change the font



```
<!doctype HTML>
<html>
<head>
  <title>Hello Mozilla</title>
  <script src="https://aframe.io/releases/0.8.0/aframe.min.js"></script>
  <script src="https://cdn.rawgit.com/jeromeetienne/AR.js/1.5.0/aframe/build/aframe-ar.js"></script>
  <script src="https://unpkg.com/aframe-text-geometry-component@^0.5.0/dist/aframe-text-geometry-component.min.js"></script>
</head>

<body style="margin : 0px; overflow: hidden;">
  <a-scene embedded arjs="sourceType: webcam;">
    <a-asset-item id="ultra" src="https://cdn.rawgit.com/HackyRoot/A-Frame-Examples/e4751baf/Happy_Birthday/assets/ultra.json"></a-asset-item>
    <a-marker-camera preset="hiro">
      <a-entity rotation="-120 0 0">
        <a-entity
          position="-1 0.1 0"
          material="color: red"
          scale="0.5 0.5 0.5"
          text-geometry="value: Hello Mozilla; font: #ultra">
        </a-entity>
      </a-entity>
    </a-marker-camera>
  </a-scene>
</body>
</html>
```



**Birthdays are incomplete  
without cake, isn't it?**



**How about a 3D model of  
cake?**



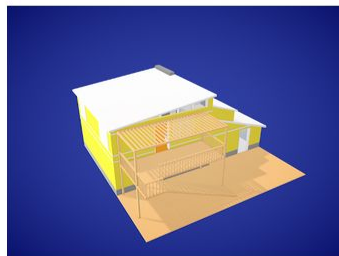
## Featured



Colorful Man



My Trip to Boca Raton



Nuketown Yellow House



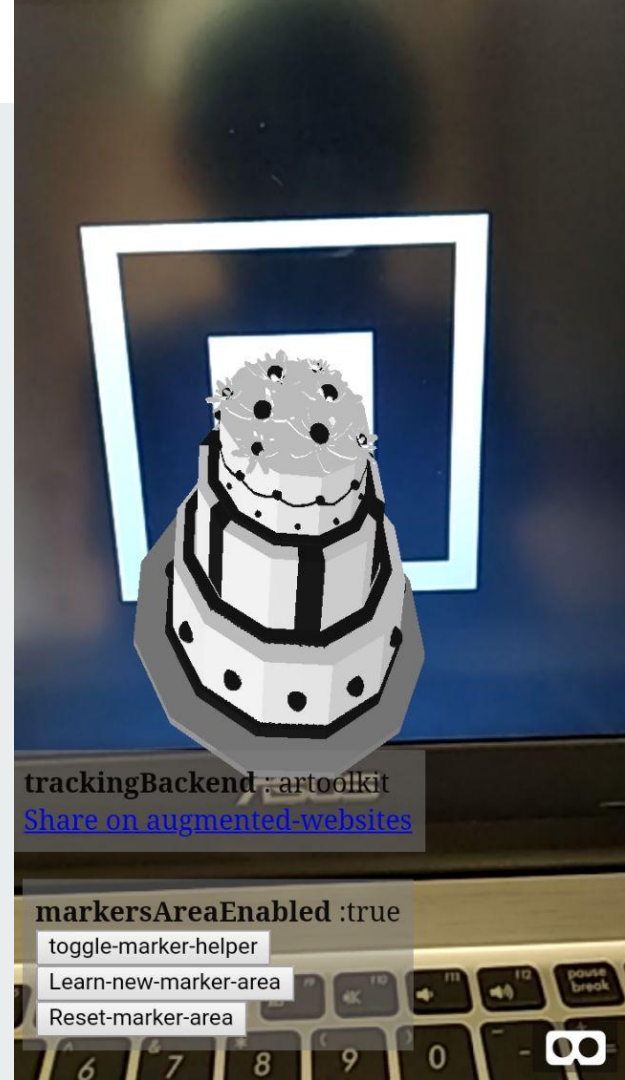
Morning Glories in a Vase



10th Immigration Experience



# Add 3D model





```
<!doctype HTML>
<html>
  <head>
    <title>HBD Aneri</title>
    <script src="https://aframe.io/releases/0.8.0/aframe.min.js"></script>
    <script src="https://cdn.rawgit.com/jeromeetienne/AR.js/1.5.0/aframe/build/aframe-ar.js"></script>
  </head>

  <body style="margin: 0px; overflow: hidden;">
    <a-scene embedded arjs="sourceType: webcam;">
      <a-assets>
        <a-asset-item id="cake-obj" src="assets/cake.obj"></a-asset-item>
        <a-asset-item id="cake-mtl" src="assets/cake.mtl"></a-asset-item>
      </a-assets>

      <a-marker-camera present="hiro">
        <a-obj-model src="#cake-obj" mtl="#cake-mtl" rotation="60 20 -155" scale="1 0.5 1"></a-obj-model>
      </a-marker-camera>

    </a-scene>
  </body>
</html>
```

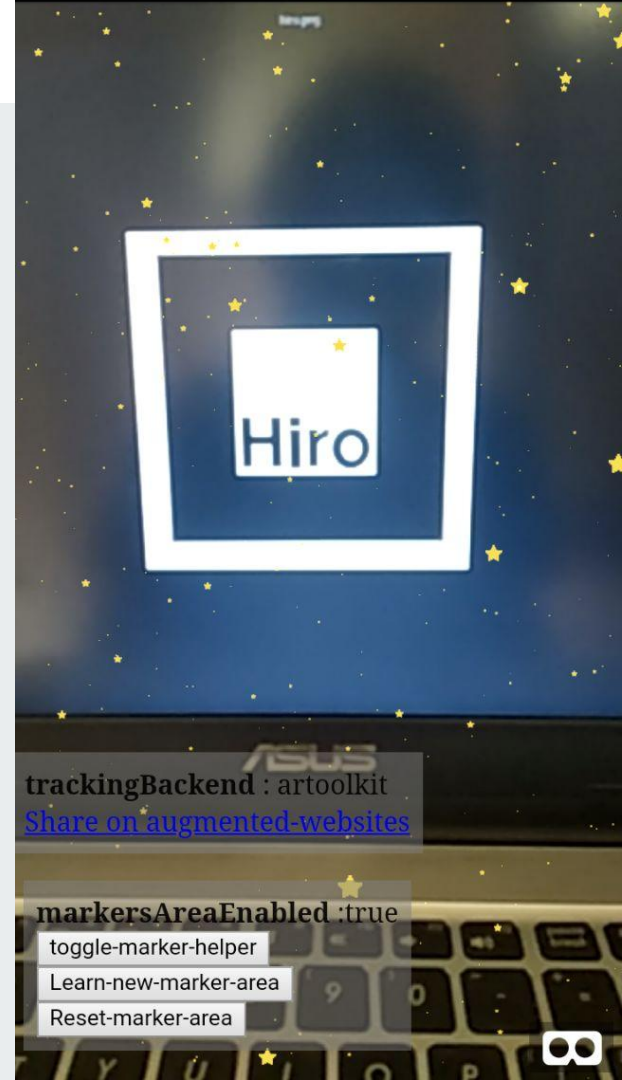
---

# How about party popper?





# AFrame Particle System





```
<!doctype HTML>
<html>
<head>
  <title>HBD Aneri</title>
  <script src="https://aframe.io/releases/0.8.0/aframe.min.js"></script>
  <script src="https://cdn.rawgit.com/jeromeetienne/AR.js/1.5.0/aframe/build/aframe-ar.js"></script>
  <script src="https://unpkg.com/aframe-particle-system-component@1.0.x/dist/aframe-particle-system-component.min.js"></script>
</head>

<body style="margin: 0px; overflow: hidden;">
  <a-scene embedded arjs="sourceType: webcam;">
    <a-marker-camera present="hiro">
      <a-entity rotation="-90 0 0">
        <a-entity
          position="0 -7 -15"
          particle-system="
            preset: default;
            color: #f9e154;
            particleCount: 3000;
            rotationAxis: z;">
        </a-entity>
      </a-entity>
    </a-marker-camera>
  </a-scene>
</body>
</html>
```



**Let's put all things together**



# Imports



```
<head>
  <title>HBD Aneri</title>
  <script src="https://aframe.io/releases/0.8.0/aframe.min.js"></script>
  <script src="https://cdn.rawgit.com/jeromeetienne/AR.js/1.5.0/aframe/build/aframe-ar.js"></script>
  <script
src="https://unpkg.com/aframe-particle-system-component@1.0.x/dist/aframe-particle-system-component.min.js">
</script>
  <script
src="https://unpkg.com/aframe-text-geometry-component@^0.5.0/dist/aframe-text-geometry-component.min.js">
</script>
</head>
```





# Assets



```
<body style="margin: 0px; overflow: hidden;">
```

```
<a-scene embedded arjs="sourceType: webcam;">
```

```
<a-assets>
```

```
<a-asset-item id="cake-obj" src="assets/cake.obj"></a-asset-item>
```

```
<a-asset-item id="cake-mtl" src="assets/cake.mtl"></a-asset-item>
```

```
<a-asset-item id="ultra" src="assets/ultra.json"></a-asset-item>
```

```
</a-assets>
```



# 3D model



```
<a-marker-camera preset="hiro">
```

```
<a-obj-model
```

```
  src="#cake-obj"
```

```
  mtl="#cake-mtl"
```

```
  rotation="60 20 -155"
```

```
  scale="1 0.5 1">
```

```
</a-obj-model>
```



# Particle System



```
<a-entity rotation="-90 0 0">
```

```
<a-entity
```

```
position="0 -7 -15"
```

```
particle-system="
```

```
  preset: default;
```

```
  color: #f9e154;
```

```
  accelerationValue: 0, -10, 0;
```

```
  particleCount: 3000;
```

```
  direction: -1;
```

```
  rotationAxis: z;
```

```
  rotation: -90, 0, 0">
```

```
</a-entity>
```

```
</a-entity>
```



# Text



```
<a-entity rotation="-120 0 0">
```

```
<a-entity
```

```
  position="-1 0.25 0"
```

```
  material="color: red"
```

```
  scale="0.25 0.25 0.25"
```

```
  text-geometry="value: Happy B'day Aneri; font: #ultra">
```

```
</a-entity>
```

```
</a-entity>
```





**And most important thing,  
close the all the tags**



```
</a-marker-camera>
```

```
</a-scene>
```

```
</body>
```

```
</html>
```



# You made it Congratulations





**Up for a challenge?**



# Add audio

  
`<a-assets>``<a-asset-item id="cake-obj"``src="https://cdn.rawgit.com/HackyRoot/A-Frame-Examples/c6a977a7/Happy_Birthday/assets/cake.obj"></a-asset-item>``<a-asset-item id="cake-mtl"``src="https://cdn.rawgit.com/HackyRoot/A-Frame-Examples/c6a977a7/Happy_Birthday/assets/cake.mtl"></a-asset-item>``<a-asset-item id="ultra"``src="https://cdn.rawgit.com/HackyRoot/A-Frame-Examples/e4751baf/Happy_Birthday/assets/ultra.json"></a-asset-item>``<audio id="bday"``src="https://cdn.rawgit.com/HackyRoot/A-Frame-Examples/c6a977a7/Happy_Birthday/assets/bday.mp3"></audio>``</a-assets>`



```
<a-entity rotation="-120 0 0">
```

```
<a-entity
```

```
  position="-1 0.25 0"
```

```
  material="color: red"
```

```
  scale="0.25 0.25 0.25"
```

```
  text-geometry="value: Happy B'day Aneri; font: #ultra"
```

```
  sound="src:#bday; autoplay: true; loop: true; on:click">
```

```
</a-entity>
```

```
</a-entity>
```

---

**No Questions Please !**

