

Hecht AR APP

A Cloud Anchor is a special type of anchor that can be used to persist AR experiences in the real world. With the ARCore Cloud Anchor API, users can create interactive layers of digital information and anchor them to actual locations, designing experiences that can be shared over time by multiple people across many different devices. Cloud Anchors connect real world locations with digital content that anyone can access from compatible mobile devices.

In this project we have developed an infrastructure that allows hosting and resolving cloud anchors in any application that developed in an Android environment. To establish and host an anchor, ARCore uses a 3D feature map of the space surrounding that anchor. To obtain this feature map, the device's rear camera must map the environment in and around the center of interest from different viewing angles and positions before the host call. The ARCore Cloud Anchor API then creates a 3D feature map of the space and returns a unique Cloud Anchor ID to the device. When another user in the same environment points their device's camera at the area where the Cloud Anchor was hosted, a resolve request causes the ARCore Cloud Anchor API to periodically compare visual features from the scene against the 3D feature map that was created. ARCore uses these comparisons to pinpoint the user's position, orientation, and pose relative to the Cloud Anchor.

Link: https://github.com/tallevi04/AR_hecht

