

Google Maps AR navigation will help city pedestrians

February 12 2019, by Nancy Cohen



Credit: Google

A new headline-hummer for Google is revelation that Google Maps is to show up in AR mode. Stay tuned. Eventually. It's being tested at the moment by select users.

Google has turned to an AR system but it is still at the pilot stage. Its

purpose is localization for on-foot navigation (translation: walkers will know where they are and where to go). Google is working on this feature, to superimpose your navigation on top of a live view of the real world, said *The Wall Street Journal*.

Expect overlays on real-world [streets](#). The illustration in *HotHardware* says it all.

Brandon Hill in *HotHardware* had details on what you see: "The upper two-thirds of the display within the app shows you the live feed from your camera; then overlays for street names, business names, and directional areas are presented that point to your intended destination. The lower third of the screen is dedicated to the standard overhead view of the map and your given [route](#)."

By select users, explained *Engadget*, local guides will test localization and give feedback to Google. Actually, "Local Guides" are an entity, as they are "an opt-in group of users who contribute reviews, photos, and places," said *TechCrunch*.

As it is now, a hearty good luck for those who think they can rely on Google to find a first-time visit to a dental office as you exit up the steps from an underground station and stand clueless on a busy city sidewalk.

That little blue dot seems to dampen the allure of Google Maps, by the way. *TechRadar*'s Harry Domanski called up that "awkward moment" for Google Maps users as [pedestrians](#) try and line themselves up with the little blue dot.

Roberto Baldwin in *Engadget* expressed his thoughts as well. "The blue dot that signifies where you are standing can vary wildly from your actual position because GPS is blocked by large buildings and your phone's compass is being thrown off by all the metal surrounding us in

urban environments."

Greg Kumparak, an editor at *TechCrunch*, called up the same weaknesses. "Maybe the little blue dot wasn't actually in the right place yet. Maybe your phone's compass was bugging out and facing the wrong way because you're surrounded by 30-story buildings full of metal and other things that compasses hate."

Working on its navigation app, Google could bring an end to those awkward moments: AI, AR and your phone's camera would add up to a pedestrian's success to find the way. Baldwin said that the system helps orientate and locate your exact position "when GPS has fallen short by combining VPS (Visual Positioning Service), Google's Street View and machine [learning](#)."

Already, there are some hands-on cues, as *The Wall Street Journal* explored an early version, said Domanski, where author David [Pierce](#) noted remarkable precision.

Kumparak had turned his Monday morning into a look-see excursion, performing a handful of tests. "Pop in your destination, hit the walking directions button... but instead of 'Start', you tap the new 'Start AR' button."

Arrows and markers appear to guide the way. The cut-out view at the bottom displays a current location on the map, "which does a pretty good job of making the transition from camera mode to map mode a bit less jarring."

Baldwin tried it out too, using it to navigate to a coffee shop. He said it was helpful. "While standing still, you point your phone's camera at nearby buildings and pan back and forth. After a few moments, it determines your position and re-oriens the arrow in [google maps](#) so you

know exactly which direction you need to be heading."

Kumparak's brief descriptions of the technology at play are breezy but suffice: There is "a [bunch](#) of machine learning voodoo going on here to ignore things that might be prominent but not necessarily permanent (like trees, large parked vehicles, and construction)."

As for delivering precise location and directions, the system can do all that by taking the view from your camera and sending a compressed version up to the cloud, he said, for analysis. "Google has a good idea of where you are from your phones' GPS signal, so it can compare the Street View data it has for the surrounding area to look for things it thinks should be nearby—certain building features, statues, or permanent structures—and work backwards to your more precise location and direction."

© 2019 Science X Network

Citation: Google Maps AR navigation will help city pedestrians (2019, February 12) retrieved 8 April 2024 from <https://techxplore.com/news/2019-02-google-ar-city-pedestrians.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--