



HERE and GiPStech advance indoor positioning for smartphones

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Las Vegas, CES 2019 – Over the past 18 months, HERE Technologies and GiPStech, an Italian technology company, have been working together to solve a problem experienced by smartphone users the world over: how to get a good location fix indoors.

As a result of the companies' collaboration, HERE has integrated GiPStech's award-winning inertial sensors technology into [HERE Positioning](#), its suite of technologies providing fast and accurate positioning globally, [indoors](#) and outdoors.

The integration takes localization performance to new levels, providing several benefits. In particular, the improved performance enhances the experience smartphone users have when locating themselves indoors. It does this by more accurately rendering the position and movement of the 'blue dot' that typically denotes a user's location on smartphone screen. This is useful when wayfinding through large venues such as airports, hospitals and corporate campuses.

Erminio Di Paola, Vice President, Tracking & Positioning at HERE Technologies, said: "We have greatly advanced our capabilities in indoor and outdoor positioning in the last two years, driven by sustained investment and innovations coming out of our labs in Finland and Germany. Our successful collaboration with GiPStech further strengthens the utility of our technology indoors, providing a better experience for smartphone users. The outcome of all of this is that we have our most competitive product yet, and that's also reflected in the increased commercial traction we are seeing today."

Gaetano D'Aquila, CEO of GiPStech, said: "The value of our localization technology is becoming clear to the market: thanks to our approach combining state-of-the-art inertial analysis, proprietary geomagnetic and custom radio-frequency we are able to deliver the best performance with minimal infrastructure. This important collaboration with HERE Technologies allows us to scale our reach by delivering the sensor fusion module and other breakthrough technologies to potentially millions of phones and applications, meanwhile our patent portfolio is extending to Europe and the U.S., providing us space to grow."

How it works

Indoors, where satellite coverage may be unavailable, it is harder for smartphones and other connected devices to accurately locate themselves. To solve this problem, HERE Positioning draws on radio technologies such as Wi-Fi and



Bluetooth. Typically, these positioning technologies work together to enable location accuracy indoors of between two and four meters.

The integration of GiPStech's inertial positioning engine into HERE Positioning means that a smartphone can now also fuse Wi-Fi and Bluetooth signals with information from its built-in inertial sensors – the accelerometer and gyroscope – as it estimates its position. Tests of this method show that positioning estimates are executed more smoothly, meaning that as a smartphone user moves around a building the movement of the blue dot is more responsive, less erratic and more closely mimics the user's changing location.

In addition, GiPStech will also provide HERE its cutting edge Visual-SLAM (Simultaneous Localization and Mapping) technology that is poised to improve adoption rate of localization services indoor and beyond, thanks to great improvements on speed and ease of installation.

Developers interested in utilizing HERE indoor positioning technology can test it out for free. Visit <https://indoor.here.com/> for more information.

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About HERE Technologies

HERE, the Open Location Platform company, enables people, enterprises and cities to harness the power of location. By making sense of the world through the lens of location we empower our customers to achieve better outcomes – from helping a city manage its infrastructure or an enterprise optimize its assets to guiding drivers to their destination safely. To learn more about HERE, including our new generation of cloud-based location platform services, visit <http://360.here.com> and www.here.com

About GiPStech

GiPStech is a technology spin-off of Università della Calabria in Italy. The company specializes in indoor localization, delivering -as certified by third parties- best localization performances at minimum infrastructure cost: its patent-protected modular platform brings together a state-of-the-art inertial engine, award-winning geomagnetic, Bluetooth, Wi-Fi and any other localized information, not only providing smooth and real-time positioning but also improving precision by leveraging non-infrastructure-based modules where the infrastructure is lacking. To learn more, visit www.gipstech.com