



Visual Inertial Navigation done right

A ROBUST CROSS-PLATFORM VISUAL-INERTIAL ODOMETRY

VIO BASICS

Visual-Inertial Odometry (VIO) is the fusion of IMU sensors with camera information to track the motion of a device. In other words, accelerometer & gyroscope signals go in together with camera frames - out comes the 6-DoF pose. VIO is the core of Augmented Reality (AR) technology as well as an important method in high-accuracy tracking of autonomous vehicles and robots.

PIVO FRAMEWORK

A new inertial-heavy way of doing VIO, in which the camera and IMU are more strongly coupled than in the previous methods. Unlike the visual-only or visual-heavy Open Source tracking methods, our implementation is built as a high-performance VIO method from the start. It more closely resembles the VIO tracking of ARCore or ARKit in structure and performance.

www.spectacularai.com

SOLUTION FEATURES

Whether your challenge is to track the movement of vehicles, people or autonomous things - you will need to understand the device's relative location in the surrounding environment.



Robust

Super-solid handling of inertial sensors gives us robustness in challenging conditions.



Accurate

Error in position less than 1% per covered distance.



Fast

Inertial-heavy tracking starts immediately.



Cross Platform

Our C++ codebase can be built for various platforms; smartphones, drones, IoT devices, wearables etc.



SCAN ME

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