

Demonstration #2: Positioning, mapping and location referencing

Your position on road infrastructure

Introduction

The CVIS POMA showcase will expose the accuracy of the different positioning packages thanks two CVIS equipped cars. Based on the communication technologies provided by COMM (M5, 3G, IPv6) and the by using the CVIS Hardware (host pc and router pc), POMA will demonstrate how to enhance the current positioning accuracy.

Indeed each car will display you the standard positioning package (i.e. standard GPS & map) versus the basic package (i.e. affordable sensors along with the ultimate map providing road infrastructure localization) versus the ultimate package (i.e. all the best sensors available to reach the lane level accuracy).

Where meeting POMA people?

POMA will be present at several locations during this experience day. Please visit us!

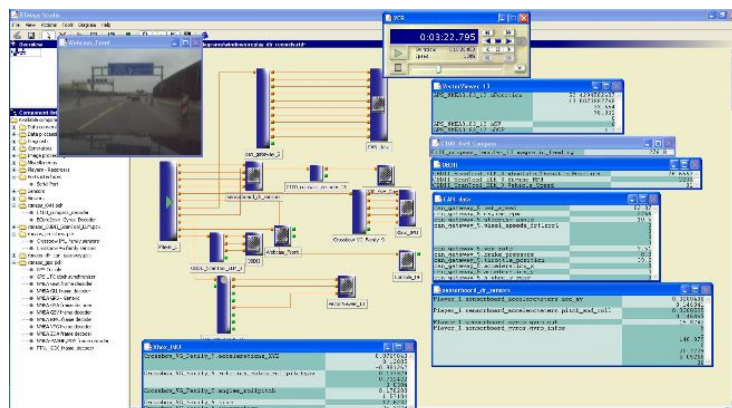
1. Outdoor Live Demo



Many current positioning systems operate on GPS alone. They provide tens of meters intrinsic accuracy, and unavailability of GPS signal can lead to a discontinuous position signal for the user. One of the novelties within CVIS is that accurate positioning is achieved by fusing multiple sensors, in order to reach the ambitious goal of lane-level positioning:

- Off-board/in-road: EGNOS server, infrastructure-based positioning (WLAN/WSN technologies)
- On-board: GPS receiver with EGNOS correction (paving the way to future Galileo positioning system), dead-reckoning, basic vehicle sensors (speed, tacho pulse), odometer, gyrometer, accelerometer, IMU

Two CVIS equipped cars with POMA packages inside (standard package, basic package and ultimate package) will show the added-value of having POMA on-board regarding the positioning accuracy and the integrity under all conditions. On-board each car one experimented POMA speaker will detail and enrich your experience.



2. POMA Video Stream

In parallel to the live demo people may stay indoor, comfortably seated and enjoy the live demo thanks a video stream from the test track back to DLR conference room. Over there experimented POMA speakers will comment live the acquired results and show you why POMA on-board a car will be a must in the coming years.

3. POMA research booth

POMA is about research topics too. If you are interested by POMA R&D, please visit our POMA booth located indoor DLR, where POMA partners will present other demos: in particular, the next generation of maps, called enhanced map (EMAP) in order to reach the ambitious objective of lane-level positioning. Also WLAN positioning showing the complementary localization system for car driving in critical areas for GPS signal (like urban canyons) will be exposed.

Contact

If you have any questions, please get in contact with the following person:

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Partners involved

