

CALL FOR PAPERS

ELMAR 2018 Special Session

Precise Positioning with GNSS, INS, Cameras or LPS

Summary:

The autonomous driving of vehicles, ships and aircrafts requires a both precise and reliable position information. Global navigation satellite system (GNSS) receivers can provide centimeter-level accuracy but lack the required reliability. Therefore, the use of other sensors including inertial sensors, odometry, cameras, radars, local position systems, lidars and barometers is becoming more attractive. These sensors have complementary advantages and drawbacks which motivates a sensor fusion.

The topics for this special session:

- Methods for Multi-GNSS positioning
- Real-Time Kinematics (RTK)
- Inertial Navigation
- Visual positioning
- Feature localization and feature tracking
- Integration of other sensors including odometry, barometers, radar and lidar
- Local Positioning Systems (LPS)
- Methods for sensor fusion including Kalman filters and particle filters
- Integrity of multi-sensor positioning

Submission:

The authors should prepare their papers according to ELMAR-2018 paper sample, convert them to PDF (based on IEEE requirements), and submit them by April 30 to patrick.henkel@anavs.de.

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