Special Session Proposal

Special Session: Multi-Sensor Fusion Positioning for Land Vehicles

Organizers:

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Integrated navigation of land vehicles is a growing and active research area with many application prospects in both military and civilian fields. Especially, unmanned ground systems have been regarded as a new engine to promote military reform, economic development and social progress in the world. Generally, multi-sensor fusion positioning possesses a great potential to enhance integrated navigation systems of land vehicles. The purpose of this session is to bring together state-of-the-art technologies, research activities both in academia and industry, so to understand the requirements and the promising technical options towards the realization of high-precision positioning and highly reliable navigation for land vehicles. The topics may include (but not be limited to): new fusion positioning strategy and architecture of integrated navigation, navigation in GNSS-challenged environment, adaptive and robust fusion algorithms, observability analysis of navigation systems, factor graph-based navigation, novel cooperative positioning and navigation methods, adaptive variable-structure navigation, bio-inspired navigation, brain-inspired cognitive navigation, intelligent navigation and new trends.