Call for Papers

Advances in Network Localization and Navigation (ANLN)
May 24, 2018

Scope

Network localization and navigation (NLN) has been gaining relevance for a myriad of new location-based services for indoor and outdoor environments. The Internet of Things (IoT), cyber-physical systems, autonomous vehicles, and 5G communication will all benefit from NLN capabilities. All this potential can be unleashed by designing solutions for localization and navigation through off-the-shelf and cost-effective technologies. These technologies are highly heterogeneous and encompass a multitude of sensory modalities such as RF, IMU, sonar, laser, IR, and visible light. The availability of such technologies clearly entails that the latest challenge in NLN is not only to fully exploit individual sensors for these tasks, but also to design and implement methods that jointly fuse information from multimodal sensors as well as from multiple agents. Data fusion, cross-layer optimization, and new application scenarios are therefore the key aspects for further advances of the field and present exciting challenges for wireless communications and signal processing practitioners and researchers.

The goal of the workshop is to solicit the development of new positioning strategies that leverage the wealth of wireless communication technologies as well as of new location-aware procedures to enhance the efficiency of communication networks.

Topics of Interest include (but not limited to):

- Data fusion for heterogeneous technologies
- Cooperative localization and navigation
- Simultaneous localization and mapping (SLAM)
- Network operation and scheduling for localization
- Multi-agent control
- Intelligent Transportation
- Situational Awareness
- Fundamental limits
- Online Bayesian filtering
- Methods with robust performance
- Position-dependent parameter estimation
- Learning algorithms for mapping
- Localization via signals of opportunity
- Location-awareness for wireless networks
- Hybrid IMU and magnetic pedestrian navigation
- Passive and active RFID
- Spectrum/Energy efficient positioning
- Sensor radar networks
- Localization methods for IoT and 5G
- Crowd-sensing
- Joint localization and communication
- Security and privacy in localization
- Mobility models for tracking
- Testbeds and experimentation

Submission Guideline: http://icc2018.ieee-icc.org/authors/call-workshop-papers

Submission link: http://edas.info/N24157

Workshop Website: http://rc.committees.comsoc.org/workshops/anln-2018/

Deadlines:
    Paper Submission Deadline: 3 January 2018
    Acceptance Notification: February 21, 2018
    Final Paper submission: March 5, 2018

Workshop Organizers & TCP Chairs
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