Railway RoSe 2018

IEEE Railway RoSe 2018

The 1st International Workshop on Robots and Sensors Networks for Railway Systems

organized in conjunction with IEEE PIMRC 2018

Sunday, September 9, 2018 **Bologna, IT**

SHORT CALL FOR PAPER

Wireless Sensor and Actuator Networks constitute one of the staples of Railroad's Infrastructure and Rolling Stock management. With the distances, environments and costs involved in the domain, a remote and reliable surveying is the ever-present objective of all the actors in the industry. The autonomous cooperative systems, made of highly mobile self-organizing robots, may survey tracks and stations, increase operators' security in maintenance interventions and scout for sudden obstacles in long and isolated tracks. Such applications foresee technological advancements that consider the fields of both Ad-Hoc Networks and Wireless Sensor and Actuator Networks. As the objectives are different from purely civilian or end-user applications, the beneficial possibilities are endless. At the same time, the challenges are as high as the stakes. Whether the innovation comes from 5G COTS or from breakthrough independent solutions, for railway operations, the networking part of the system has to show higher levels of reliability, compared to the end-user domain, as well as increased capabilities.

Railway RoSe aims at bringing together state-of-the-art contributions on the design, specification and implementation of architectures, algorithms and protocols for current and future applications of such systems, having special consideration for nature-inspired, machine-learning based techniques and data-driven approaches for network architecture, protocol design and system optimization.

Prospective authors are invited to submit technical papers of their previously unpublished work. Accepted workshop papers will be part of the Conference Proceedings and will be uploaded to IEEE Xplore.

Improved versions of selected papers from the workshop will be invited for possible publication in a special issue of *Wiley's Internet Technology Letters*.

Please check the list of topics and the workshop info at:
http://railwayrose2018.nws.cs.unibo.it

IMPORTANT DATES

Paper submission:
May 18, 2018

Acceptance notification:
June 15, 2018

Final paper due:
June 29, 2018

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