



INTERNATIONAL

INVITED SESSION SUMMARY

Title of Session:

Artificial Intelligence for autonomous navigation and robotics

Name, Title and Affiliation of Chair:

Dr Samia Ainouz, Associate Professor, LITIS, INSA Rouen-Normandie
Prof. Laurent Vercoeur, Full Professor, LITIS, INSA Rouen-Normandie

Details of Session (including aim and scope):

This session proposal focuses on the need to implement autonomous navigation mechanisms in the context of unmanned vehicles or robotics. Autonomous navigation raises several scientific challenges from scene perception to autonomous decision making. Recent researches focus on artificial intelligence techniques to offer efficient solutions at different stages.

We invite for this session articles proposing new contributions in artificial intelligence applied to autonomous navigation. The session topics include:

- perception
- multimodal sensor fusion
- computer vision
- visual SLAM
- path planning
- multi-agent planning
- multi-agent decision making
- machine learning
- reinforcement learning

Contributing researches of the submitted papers should be applied to autonomous navigation.

Main Contributing Researchers / Research Centres (tentative, if known at this stage):

Website URL of Call for Papers (if any):

Email & Contact Details:

samia.ainouz@insa-rouen.fr

laurent.vercouter@insa-rouen.fr