2015 IEEE/RSJ International Conference on Intelligent Robots and Systems
Full Day Workshop in Saal F
September 28th, Hamburg, Germany

Research Director Christian Laugier, INRIA, Emotion project,
Christian.Laugier@inrialpes.fr, http://emotion.inrialpes.fr/laugier

Professor Philippe Martinet, IRCCyN-CNRS Laboratory, Ecole Centrale de Nantes,

Professor Urbano Nunes, University of Coimbra,
urbano@deec.uc.pt, http://www.isr.uc.pt/~urbano

Professor Christoph Stiller, Karlsruher Institut für Technologie,
stiller@kit.edu, http://www.mrt.kit.edu/mitarbeiter_stiller.php

This workshop is organized in the framework of the IEEE Robotics and Automation's Technical Committee on: Autonomous Ground Vehicles and Intelligent Transportation Systems

TC-chairs: P. Martinet, C. Laugier, C. Stiller
Session I: Localization & mapping 8:30
Chairman: C. Laugier (INRIA, France)

Keynote speaker: Philippe Bonnifait (Heudiasyc, France) 35min + 5min questions
Title: Autonomous Integrity Monitoring of Navigation Maps on board Vehicles

Title: Collaborative Visual SLAM Framework for a Multi-Robot System
Authors: Nived Chebrolu, David Marquez-Gamez and Philippe Martinet 17min + 3min questions

Title: Improving Vision-based Topological Localization by Combining Local and Global Image Features
Authors: Shuai Yang and Han Wang 17min + 3min questions

Title: PML-SLAM: a solution for localization in large-scale urban environments
Authors: S. Alsayed, G. Bresson, F. Nashashibi, A. Verroust Blondet 17min + 3min questions
Session II: Perception and Situation Awareness 10:30
Chairman: U. Nunes (ISR Portugal)

Keynote speaker: Dr.-Ing. Michael Darms (Volkswagen Aktiengesellschaft, Group Research, Germany)
Title: Perception for automated and assisted driving 35min + 5min questions

Title: Free-space Detection using Online Disparity-supervised Color Modeling 17min + 3min questions
Authors: Willem P. Sanberg, Gijs Dubbelman and Peter H.N. de With

Title: Vision-Based Road Detection using Contextual Blocks 17min + 3min questions
Authors: Caio Cesar Teodoro Mendes, Vincent Fremont and Denis Fernando Wolf

Title: Following Dirt Roads at Night-Time: Sensors and Features for Lane Recognition and Tracking
17min + 3min questions
Authors: Sebastian F. X. Bayerl, Thorsten Luettel and Hans-Joachim Wuensche
Session III: Interactive session 13:30 -14:30
Chairman: W. Han (NTU, Singapore)

Title: Generating Compact Models for Traffic Scenarios to Estimate Driver Behavior Using Semantic Reasoning
Authors: Ilya Dianov, Karinne Ramirez-Amaro and Gordon Cheng

Title: 16 channels Velodyne versus planar LiDARs based perception system for Large Scale 2D-SLAM
Authors: Nobili S., Dominguez S., Garcia G., Martinet P.

Title: Discriminative Map Matching Using View Dependent Map Descriptor
Authors: Liu Enfu Tanaka Kanji

Title: Path Planning and Steering Control for an Automatic Perpendicular Parking Assist System
Authors: Plamen Petrov Fawzi Nashashibi and Mohamed Marouf

Title: Obstacle segmentation with low-density disparity maps
Authors: Daniela A. Ridel, Patrick Y. Shinzato and Denis F. Wolf
Session IV: Planning & Navigation\textit{14:30}
Chairman: \textit{P. Bonnifait} (Heudiasyc, France)

\textbf{Title: Determining the Nonexistence of Evasive Trajectories for Collision Avoidance Systems} \textit{14:30}
Keynote speaker: Pr \textit{Matthias Althoff} (Technische Universität München, Germany) \textit{35min + 5min questions}

\textbf{Title: Safe prediction-based local path planning using obstacle probability sections} \textit{17min + 3min questions}
Authors: Tanja Hebecker and Frank Ortmeier

\textbf{Title: Improving Monte Carlo Localization using Reflective Markers: An Experimental Analysis} \textit{17min + 3min questions (Presented by S. Dominguez Quijada)}
Authors: Francesco Leofante, Gwénolé Le Moal, Gaëtan Garcia, Patrice Rabaté
Session V: Sensing 16:30
Chairman: U. Nunes (ISR, Portugal)

Keynote speaker: Christian Laugier (INRIA, France)
Title: Embedded Bayesian Perception & Risk Assessment for ADAS & Autonomous Cars 35min + 5min questions

Title: 360 degree 3d ground surface reconstruction using a single rotating camera 17min + 3min questions
Authors: Motooka, Sugimoto, Okotumi, Shima

Title: Towards Characterizing the Behavior of LiDARs in Snowy Conditions 17min + 3min questions
Authors: Sebastien Michaud, Jean-Francois Lalonde, and Philippe Giguere
PPNIV15
✓ Over 160 attendees ➔ Submit and share your work through PPNIV workshops
✓ Great Keynotes and Presentations
✓ Papers, presentations and proceedings will be on PPNIV15 webpage

Become member of our TC send email to us

Next events:
✓ Special Issue on Safety and Security of Intelligent Vehicles, IEEE Intelligent Transportation Systems Magazine, J. C. Cunha, K. Branco, A. Casimiro, U. Nunes

✓ New PPNIV’16 will be submitted to IROS’16