



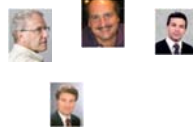
2014 IEEE/RSJ International Conference on Intelligent Robots and Systems  
 Full Day Workshop in Salon 12  
 September 14th, Chicago, USA

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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. Stiller* (KIT, Germany)

**Title: Automated driving in urban environments: car sharing distribution system and Parking Valet as canonical use-cases 8:30**

**Keynote speaker: Fawzi Nashashibi** (INRIA, Rocquencourt, France) 35min + 5min questions

Co-authors: John Mullane, Keith Leung, Felipe Inostroza

**Title: An Iterative Graph Optimization Approach for 2D SLAM 9:10**

Authors: **He Zhang**, Guoliang Liu, and Zifeng Hou 17min + 3min questions

**Title: Appearance-based Localization across Seasons in a Metric Map 9:30**

Authors: **Chris Beall**, Frank Dellaert 17min + 3min questions

**Title: High Precision 6DOF Vehicle Navigation in Urban Environments using a Low-cost Single-frequency GPS Receiver 9:50**

Authors: **Sheng Zhao**, Yiming Chen, Jay A. Farrell 17min + 3min questions



**Session II: Perception and Situation Awareness 10:30**

Chairman: **C. Laugier** (INRIA, France)

**Title: Situation Perception and Prediction for Autonomous Driving 10:30**

**Keynote speaker: Chritoph Stiller** (KIT, Karlsruhe, Germany) 35min + 5min questions

Co Authors: Julius Ziegler, Markus Schreiber, Philipp Bender

**Title: Detection and Tracking of the Vanishing Point on a Horizon for Automotive Applications 11:10**

Authors: **Young-Woo Seo**, Ragnathan Rajkumar 17min + 3min questions

**Title: Robot Navigation Using Radio Signal in Wireless Sensor Networks 11:30**

Authors: **Ju Wang**, Mohammad M Tabanjeh, Tariq Qazi, Brian Bennett, Cesar Flores Montoya, Eric Glover, Meesha Rashidi 17min + 3min questions



**Session III: Interactive session 13:30 -14:30**

Chairman: **P. Martinet** (IRCCyN/ECN, Nantes, France)

**Title: Task and motion planning for Selective Weed Control using a Team of Autonomous Vehicles**

Authors: **I.A. Hameed**, A. la Cour Harbo, K.D. Hansen

**Title: Remaining Range Indicator System for Electric Vehicle**

Authors: **R. Potarusov**, I. Kobersy, J. P. Lebacque

**Title: Landmark Discovery for Single-View Cross-Season Localization**

Authors: Ando Masatoshi, Chokushi Yuuto, **Tanaka Kanji**

**Title: Obstacle Detection and Avoidance from an Automated Guided Vehicle**

Authors: **Roger Bostelman**, Will Shackelford, Geraldine Cheok

**Title: Frontier Based Exploration with Task Cancellation**

Authors: P.G.C.N. Senarathne, **Danwei Wang**

**Title: A Pareto Front-Based Multiobjective Path Planning Algorithm**

Authors: **Alexander Lavin**





**Session IV: Navigation, Control, Planning 14:30**

Chairman: **Fawzi Nashashibi** (INRIA, France)

**Title: Formulation, Calibration, and Uses of Constrained Kinematic Models for WMRs 14:30**

**Keynote speaker: Alonzo Kelly (Robotics Institute, CMU, Pittsburgh, Pennsylvania, USA) 35min + 5min questions**

Co Author: Neal Seegmiller

**Title: Modified flatbed tow truck model for stable and safe platooning in presences of lags, communication and sensing delays 15:10**

Authors: A. Ali, G. Garcia, P. Martinet 17min + 3min questions

**Title: Global Robot Ego-localization Combining Image Retrieval and HMM-based Filtering 15:30**

Authors: Cedric Le Barz, Nicolas Thome, Matthieu Cord, Stephane Herbin, Martial Sanfourche 17min + 3min questions



**Panel Session: Towards driverless vehicles ? 16:20**

Chairman: **C. Laugier**

The purpose of this panel session is to discuss the hot topics of "Advanced Driving Assistance Systems" and of "Driverless Vehicles". All the related Technical, Socio economic and Legal issues will be addressed and discussed.

Participant: **Seiichi Mita** (Toyota Technological Institute Nagoya, Japan)

Participant: **Fawzi Nashashibi** (INRIA, France)

Participant: **Christoph Stiller** (KIT, Germany)



#### **PPNIV14**

- ✓ Near 100 attendees → Submit and share your work through PPNIV workshops
- ✓ Great Keynotes and Panel
- ✓ Papers, presentations and proceedings will be on PPNIV14 webpage

**→ <http://ppniv14.irccyn.ec-nantes.fr>**

#### **Next events:**

- ✓ Special issue on Perception and Planning for Autonomous Vehicles in ITS Magazine
- ✓ New PPNIV'15 will be submitted to IROS'15

*<http://www.ieee-ras.org/autonomous-ground-vehicles-and-intelligent-transportation-systems>*