

11th Workshop on Planning, Perception and Navigation for Intelligent Vehicles



2019 IEEE/RSJ International Conference on Intelligent Robots and Systems

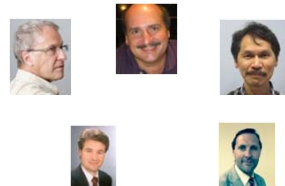
**Full Day Workshop
November 4th, Macau, China**

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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, M.H. Ang, D. Wolf

11th Workshop on Planning, Perception and Navigation for Intelligent Vehicles



9:10-10:45 Session 1: Machine & Deep Learning

Chairman: Christian Laugier (CHROMA, Inria)

Title: The road towards perception for autonomous driving: methods, challenges, and the data required *9:10-9:55*

Keynote speaker: Roland Meertens (AID, Munich, Germany)

Title: Transformation-adversarial network for road detection in LIDAR rings, and model-free evidential road grid mapping *9:55-10:20*

Authors: E. Cappelier, F. Davoine, V. Cherfaoui, Y. Li

Title: End-to-End Deep Neural Network Design for Short-term Path Planning *10:20-10:45*

Authors: M.Q. Dao, D. Lanza, V. Frémont

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11:15-12:50 Session 2 : Perception & Situation awareness

Chairman: Marcelo Ang (NUS, Singapore)

Title: Sim to Real: Using Simulation for 3D Perception and Navigation 11:15-12:00

Keynote speaker: Ruigang Yang (Baidu, China)

Title: Feature Generator Layer for Semantic Segmentation Under Different Weather Conditions for Autonomous Vehicles 12:00-12:25

Authors: O. Erkent, C. Laugier

Title: An Edge-Cloud Computing Model for Autonomous Vehicles 12:25-12:50

Authors: Y. Sasaki, T. Sato, H. Chishiro, T. Ishigooka, S. Otsuka, K. Yoshimura, S. Kato

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14:00-15:45 Session 3: Planning & Navigation

Chairman: Christian Laugier (CHROMA, INRIA, France)

Title: Intelligent Perception, Navigation and Control for Multi-robot Systems 14:00-14:45

Keynote speaker: Danwei Wang (NTU, Singapore)

Title: miniSAM: A Flexible Factor Graph Non-linear Least Squares Optimization

Framework 14:45-15:10

Authors: J. Dong, Z. Lv

Title: Linear Camera Velocities and Point Feature Depth Estimation Using Unknown Input

Observer 15:10-15:35

Authors: R. Benyoucef, L. Nehaoua, H. Hadj-Abdelkader, H. Arioui

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16:15-18:00 Human vehicle interaction

Chairman: Marcelo Ang (NUS, Singapore)

Title: The Effect of Vehicle Automation on Road Safety 16:15-17:00

Keynote speaker: Cristina Olaverri (Johannes Kepler Universitat, Austria)

Round table: Human vehicle interaction 17:00-18:00

Participants:

Henriette Cornet (TUMCREATE, Singapore)

Li Haizhou (National University of Singapore)

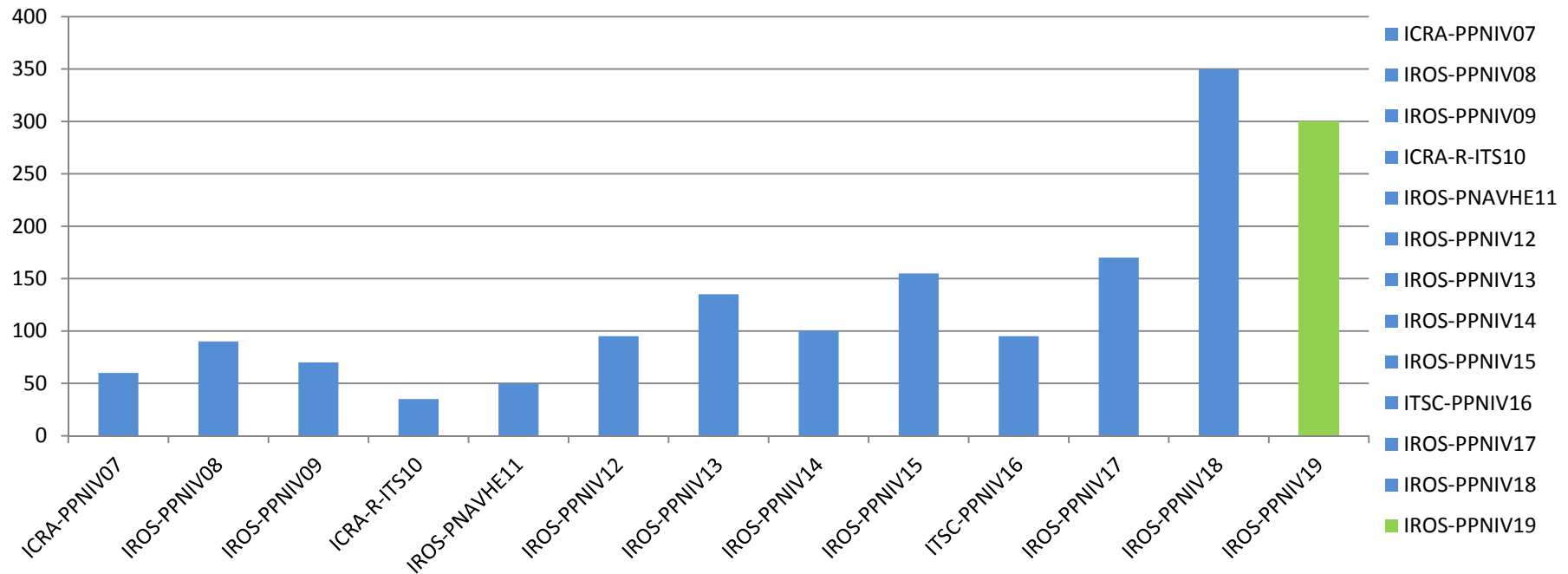
Cristina Olaverri (Johannes Kepler Universitat, Austria)

Juraj Kabzan (Nutonomy, Singapore)

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Attendees



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PPNIV19

- ✓ Over 300 attendees → Submit and share your work through PPNIV workshops
- ✓ Great Keynotes and Presentations
- ✓ Presentations, papers, and workshop proceedings will be on PPNIV19 webpage

→ <https://project.inria.fr/ppniv19>

Next events:

- ✓ Special issue on Perception and Decision for Autonomous Vehicles in IEEE Trans IV
- ✓ New PPNIV'20 will be submitted to IROS'20 (12th edition...)

Announcements:

- ✓ Looking for Junior Co-chair for the TC (contact us)
- ✓ Join the Mailing list by using the website of the TC

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