

### International Journal (peer reviewed)

- **Pradalier, C.; Tews, A., and Roberts, J.** Vision-based operations of a large industrial vehicle: autonomous hot metal carrier. *Journal of Field Robotics*. 2008; 25(4-5):243-267.
- **Pradalier, C. and Usher, K.** Robust trajectory tracking for a reversing tractor trailer. *Journal of Field Robotics*. 2008; 25(6-7):378-399.
- **Negre, A.; Pradalier, C., and Dunbabin, M.** Robust vision-based underwater homing using self-similar landmarks. *Journal of Field Robotics*. 2008; 25(6-7):360-377.
- **Coué, C.; Pradalier, C.; Laugier, C.; Fraichard, T.; Bessière, P.** [Bayesian Occupancy Filtering for Multitarget Tracking: an Automotive Application](#) Int. Journal of Robotics Research, Volume 25, Number 1, page 19--30 - January 2006
- **Pradalier, C.; Hermosillo, J.; Koike, C.; Braillon, C.; Bessière, P.; Laugier, C.** [The CyCab: a car-like robot navigating autonomously and safely among pedestrians](#) Robotics and Autonomous Systems, Volume 50, Number 1, page 51-68 - 2005
- **Hermosillo, J.; Pradalier, C.; Sekhavat, S.; Laugier, C.;** [Autonomous Navigation of a Bi-steerable Car : Experimental Issues](#) Machine Intelligence and Robotic Control Journal, Volume 5, Number 3, page 95-102 - September 2004

### International conferences (peer reviewed)

#### ETH

- L. Giger, S. Wismer, S. Boehl, G. Buesser, H. Erckens, J. Weber, P. Moser, P. Schwizer, C. Pradalier, R. Siegwart, "Design and Construction of the Autonomous Sailing Vessel AVALON", *Proc. of The World Robotic Sailing Championship and International Robotic Sailing Conference*, 2009.
- X. Perrin, F. Colas, C. Pradalier, R. Siegwart, "Learning to identify users and predict their destination in a robotic guidance application", *Field and Service Robotics (FSR)*, 2009.
- M. Liu, D. Scaramuzza, C. Pradalier, R. Siegwart, Q. Chen, "Scene Recognition with Omnidirectional Vision for Topological Map using Lightweight Adaptive Descriptors", *Proc. of The IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*, October 2009.
- A. Krebs, C. Pradalier, R. Siegwart, "Comparison of Boosting based Terrain Classification using Proprioceptive and Exteroceptive Data", *Proc. of The 11th International Symposium on Experimental Robotics (ISER)*, July 2008.
- M. Hoepflinger, A. Krebs, C. Pradalier, C. Lee, R. Obstei, R. Siegwart, "Description of the Locomotion Control Architecture on the ExoMars Rover Breadboard", *Proc. of The 10th ESA Workshop on Advanced Space Technologies for Robotics and Automation (ASTRA)*, 2008.
- A. Krebs, C. Pradalier, R. Siegwart, "Strategy for adaptive rove behavior based on experiment", *Proc of the 10th ESA Workshop on Advanced Space Technologies for Robotics and Automation*, 2008.

- **Pradalier, C.** Vision-based handling tasks for an autonomous outdoor forklift. In: Laugier, C. and Siegwart, R., eds. *Field and Service Robots: Results of the 6th International Conference (FSR '07)*; Chamonix, France. Springer; 2008: 61-70. (Springer tracts in advanced robotics. v. 42). ISBN: 9783540754039.
- **Pradalier, C. and Usher, K.** Experiments in autonomous reversing of a tractor-trailer system. In: Laugier, C. and Siegwart, R., eds. *Field and Service Robots: Results of the 6th International Conference (FSR '07)*; Chamonix, France. Springer; 2008: 475-484. (Springer tracts in advanced robotics. v. 42). ISBN: 9783540754039.
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- **Roberts, J.; Pradalier, C., and Tews, A.** Autonomous hot metal carrier. In: Grandfield, J. F. and Taylor, J. A., eds. *Aluminium Cast House Technology : 10th Australasian Conference & Exhibition*; Sydney, NSW. CSIRO Publ.; 2007: 247-256. ISBN: 9780643094741.
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- **Brailion, C.; Pradalier, C.; Crowley, J. L., and Laugier, C.** Real-time moving obstacle detection using optical flow models. *IEEE Intelligent Vehicle Symposium (IV 2006)*; Tokyo, Japan. IEEE; 2006: 466-471.
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- [Driving On A Known Sensori-Motor Trajectory With A Car-like Robot](#) Cédric Pradalier, Pierre Bessière, Christian Laugier Proc. of the Int. Symp. on Experimental Robotics - Singapore (SG) - June 2004
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- [Obstacles Avoidance for Car-Like Robots. Integration And Experimentation on Two Robots](#) Olivier Lefebvre, Florent Lamiroux, Cédric Pradalier, Thierry Fraichard Proc. of the IEEE Int. Conf. on Robotics and Automation - New Orleans, LA (US), page 4277--4282 - April 2004
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- [Simultaneous Localization and Mapping using the Geometric Projection Filter and Correspondence Graph Matching](#) Cédric Pradalier, Sepanta Sekhavat Advanced Robotics - 2004
- [Bayesian Programming for Multi-Target Tracking : an Automotive Application](#) Christophe Coué, Cédric Pradalier, Christian Laugier Proc. of the Int. Conf. on Field and Service Robotics - Lake Yamanaka (JP) - July 2003
- [Experimental Issues from Map Building to Trajectory Execution for a Bi-steerable Car.](#) Jorje Hermosillo, Cédric Pradalier, Sepanta Sekhavat, Christian Laugier Proc. of the IEEE Int. Conf. on Advanced Robotics - Coimbra (PT) - July 2003
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- [Towards Motion Autonomy of a Bi-steerable Car: Experimental Issues from Map-building to Trajectory Execution](#) Jorje Hermosillo, Cédric Pradalier, Sepanta Sekhavat, Christian Laugier, Gerard Baille Proc. of the IEEE Int. Conf. on Robotics and Automation - Taipei (TW) - May 2003
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### **Book Chapter**

- Pradalier,C.; Bessiere,P. The CyCab: Bayesian navigation on sensory--motor trajectories Chapter 3 of " Probabilistic Reasoning and Decision Making in Sensory-Motor Systems ", Springer Tracts in Advanced Robotics , Vol. 46, Bessière, Pierre; Laugier, Christian; Siegwart, Roland (Eds.)