

# Springer Tracts in Advanced Robotics

Edited by B. Siciliano, O. Khatib, and F. Groen

**Vol. 29:** Secchi, C.; Stramigioli, S.; Fantuzzi, C.  
Control of Interactive Robotic Interfaces – A  
Port-Hamiltonian Approach  
225 p. 2007 [978-3-540-49712-7]

**Vol. 28:** Thrun, S.; Brooks, R.; Durrant-Whyte, H. (Eds.)  
Robotics Research – Results of the 12th International  
Symposium ISRR  
602 p. 2007 [978-3-540-48110-2]

**Vol. 27:** Montemerlo, M.; Thrun, S.  
FastSLAM – A Scalable Method for the Simultaneous  
Localization and Mapping Problem in Robotics  
120 p. 2007 [978-3-540-46399-3]

**Vol. 26:** Taylor, G.; Kleeman, L.  
Visual Perception and Robotic Manipulation – 3D  
Object Recognition, Tracking and Hand-Eye  
Coordination  
218 p. 2007 [978-3-540-33454-5]

**Vol. 25:** Corke, P.; Sukkarieh, S. (Eds.)  
Field and Service Robotics – Results of the 5th  
International Conference  
580 p. 2006 [978-3-540-33452-1]

**Vol. 24:** Yuta, S.; Asama, H.; Thrun, S.; Prassler, E.;  
Tsubouchi, T. (Eds.)  
Field and Service Robotics – Recent Advances in  
Research and Applications  
550 p. 2006 [978-3-540-32801-8]

**Vol. 23:** Andrade-Cetto, J.; Sanfeliu, A.  
Environment Learning for Indoor Mobile Robots – A  
Stochastic State Estimation Approach to Simultaneous  
Localization and Map Building  
130 p. 2006 [978-3-540-32795-0]

**Vol. 22:** Christensen, H.I. (Ed.)  
European Robotics Symposium 2006  
209 p. 2006 [978-3-540-32688-5]

**Vol. 21:** Ang Jr., H.; Khatib, O. (Eds.)  
Experimental Robotics IX – The 9th International  
Symposium on Experimental Robotics  
618 p. 2006 [978-3-540-28816-9]

**Vol. 20:** Xu, Y.; Ou, Y.  
Control of Single Wheel Robots  
188 p. 2005 [978-3-540-28184-9]

**Vol. 19:** Lefebvre, T.; Bruyninckx, H.; De Schutter, J.  
Nonlinear Kalman Filtering for Force-Controlled  
Robot Tasks  
280 p. 2005 [978-3-540-28023-1]

**Vol. 18:** Barbagli, F.; Prattichizzo, D.; Salisbury, K. (Eds.)  
Multi-point Interaction with Real and Virtual Objects  
281 p. 2005 [978-3-540-26036-3]

**Vol. 17:** Erdmann, M.; Hsu, D.; Overmars, M.;  
van der Stappen, F.A. (Eds.)  
Algorithmic Foundations of Robotics VI  
472 p. 2005 [978-3-540-25728-8]

**Vol. 16:** Cuesta, F.; Ollero, A.  
Intelligent Mobile Robot Navigation  
224 p. 2005 [978-3-540-23956-7]

**Vol. 15:** Dario, P.; Chatila R. (Eds.)  
Robotics Research – The Eleventh International  
Symposium  
595 p. 2005 [978-3-540-23214-8]

**Vol. 14:** Prassler, E.; Lawitzky, G.; Stopp, A.;  
Grunwald, G.; Hägele, M.; Dillmann, R.;  
Iossifidis, I. (Eds.)  
Advances in Human-Robot Interaction  
414 p. 2005 [978-3-540-23211-7]

**Vol. 13:** Chung, W.  
Nonholonomic Manipulators  
115 p. 2004 [978-3-540-22108-1]

**Vol. 12:** Iagnemma K.; Dubowsky, S.  
Mobile Robots in Rough Terrain –  
Estimation, Motion Planning, and Control  
with Application to Planetary Rovers  
123 p. 2004 [978-3-540-21968-2]

**Vol. 11:** Kim, J.-H.; Kim, D.-H.; Kim, Y.-J.; Seow, K.-T.  
Soccer Robotics  
353 p. 2004 [978-3-540-21859-3]

**Vol. 10:** Siciliano, B.; De Luca, A.; Melchiorri, C.;  
Casalino, G. (Eds.)  
Advances in Control of Articulated and Mobile Robots  
259 p. 2004 [978-3-540-20783-2]

**Vol. 9:** Yamane, K.  
Simulating and Generating Motions of Human Figures  
176 p. 2004 [978-3-540-20317-9]

**Vol. 8:** Baeten, J.; De Schutter, J.  
Integrated Visual Servoing and Force Control – The  
Task Frame Approach  
198 p. 2004 [978-3-540-40475-0]

**Vol. 7:** Boissonnat, J.-D.; Burdick, J.; Goldberg, K.;  
Hutchinson, S. (Eds.)  
Algorithmic Foundations of Robotics V  
577 p. 2004 [978-3-540-40476-7]

**Vol. 6:** Jarvis, R.A.; Zelinsky, A. (Eds.)  
Robotics Research – The Tenth International Symposium  
580 p. 2003 [978-3-540-00550-6]

**Vol. 5:** Siciliano, B.; Dario, P. (Eds.)  
Experimental Robotics VIII – Proceedings of the 8th  
International Symposium ISERO2  
685 p. 2003 [978-3-540-00305-2]

**Vol. 4:** Bicchi, A.; Christensen, H.I.; Prattichizzo, D. (Eds.)  
Control Problems in Robotics  
296 p. 2003 [978-3-540-00251-2]

**Vol. 3:** Natale, C.  
Interaction Control of Robot Manipulators –  
Six-degrees-of-freedom Tasks  
120 p. 2003 [978-3-540-00159-1]

**Vol. 2:** Antonelli, G.  
Underwater Robots – Motion and Force Control of  
Vehicle-Manipulator Systems  
268 p. 2006 [978-3-540-31752-4]

**Vol. 1:** Caccavale, F.; Villani, L. (Eds.)  
Fault Diagnosis and Fault Tolerance for Mechatronic  
Systems – Recent Advances  
191 p. 2003 [978-3-540-44159-5]

Printing: Krips bv, Meppel  
Binding: Stürtz, Würzburg