

Dr. Marius Hofmeister

Background

- Former research assistant at the Department of Cognitive Systems at the University of Tübingen

Projects

- Self-localization, mapping and coverage with resource-limited mobile robots
- Cooperative behavior of heterogeneous robot teams

Publications

- [1] Marius Hofmeister. *Self-Localization, Mapping and Coverage with Resource-Limited Mobile Robots*. PhD thesis, University of Tuebingen, Tübingen, Germany, July 2011.
- [2] Marius Hofmeister, Marcel Kronfeld, and Andreas Zell. Cooperative visual mapping in a heterogeneous team of mobile robots. In *IEEE International Conference on Robotics and Automation (ICRA)*, pages 1491--1496, Shanghai, China, May 2011.
- [3] Marius Hofmeister and Marcel Kronfeld. Multi-robot coverage considering line-of-sight conditions. In *7th IFAC Symposium on Intelligent Autonomous Vehicles (IAV)*, Lecce, Italy, September 2010.
- [4] Kiattisin Kanjanawanishkul, Marius Hofmeister, and Andreas Zell. Path following with an optimal forward velocity for a mobile robot. In *7th IFAC Symposium on Intelligent Autonomous Vehicles (IAV)*, Lecce, Italy, September 2010.
- [5] Kiattisin Kanjanawanishkul, Marius Hofmeister, and Marius Zell. Experiments on formation switching for mobile robots. In *IEEE/ASME International Conference on Advanced Intelligent Mechatronics (AIM 2010)*, pages 323--328, Montréal, Canada, July 2010.
- [6] Marius Hofmeister, Philipp Vorst, and Andreas Zell. A comparison of efficient global image features for localizing small mobile robots. In *ISR/ROBOTIK 2010 (Proceedings of the joint conference of ISR 2010 (41st International Symposium on Robotics) and ROBOTIK 2010 (6th German Conference on Robotics))*, pages 143--150. VDE Verlag, June 2010.
- [7] Marius Hofmeister, Sara Erhard, and Andreas Zell. Visual self-localization with tiny images. In Rüdiger Dillmann, Jürgen Beyerer, and Christoph Stiller, editors, *Autonome Mobile Systeme 2009 - 21. Fachgespräch*, pages 177--184, Karlsruhe, Germany, December 2009. Springer-Verlag.
- [8] Kiattisin Kanjanawanishkul, Marius Hofmeister, and Andreas Zell. Coordinated path following for mobile robots. In Rüdiger Dillmann, Jürgen Beyerer, and Christoph Stiller, editors, *Autonome Mobile Systeme 2009 - 21. Fachgespräch*, pages 185--192, Karlsruhe, Germany, December 2009. Springer-Verlag.
- [9] Kiattisin Kanjanawanishkul, Marius Hofmeister, and Andreas Zell. Smooth reference tracking of a mobile robot using nonlinear model predictive control. In *4th European Conference on Mobile Robots (ECMR)*, pages 161--166, Mlini/Dubrovnik, Croatia, September 2009. KoREMA, Zagreb.
- [10] Marius Hofmeister, Maria Liebsch, and Andreas Zell. Visual self-localization for small mobile robots with weighted gradient orientation histograms. In *40th International Symposium on Robotics (ISR)*, pages 87--91, Barcelona, Spain, 2009.
- [11] Marius Hofmeister. BMF im Praxiseinsatz. Entwicklung einer Integrationschnittstelle für Content-Management-Systeme. *Fachzeitschrift für Fernsehen, Film und elektronische Medien (FKT)*, (5):230--237, May 2007.