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Kurz-Vita
- seit 2017 Professor, Universität zu Lübeck
- 2013-2017 Juniorprofessor, Universität Paderborn
- 04 bis 10/2016 Vertretungs-Professur, TU Chemnitz
- 2009-2012 Postdoc, Karl-Franzens-Universität Graz
- 2008 Doktor der Ingenieurwissenschaften (Universität Karlsruhe)
- 2006 Diplom Informatik (Universität Stuttgart)
- Auslandsaufenthalte: Oregon State Univ., USA und Monash Univ., Australien

2015 bis 2019 Koordination des EU-Projekts flora robotica

vollständige Listen aller Publikationen:
http://heikohamann.de und google scholar

Publikationen

[DZG19] Divband Soorati, M.; Zahadat, P.; Ghofrani, J.; Hamann, H.: *Adaptive Path Formation in Self-Assembling Robot Swarms by Tree-like Vascular Morphogenesis*. Springer Proceedings in Advanced Robotics, vol. 9, 299-311, Springer International Publishing, Cham 2019 [Paper]

[HPV19] Hamann, H.; Pinciroli, C.; von Mammen, S.: *A Gamification Concept for Teaching Swarm Robotics*. EWME 2018, IEEE, 2019 [Abstract]

[KaH19a] Kaiser, T.K.; Hamann, H.: *Self-Assembly in Patterns with Minimal Surprise: Engineered Self-Organization and Adaptation to the Environment*. Correll N., Schwager M., Otte M. (eds) Distributed Autonomous Robotic Systems. Springer Proceedings in Advanced Robotics, vol 9. , 183-195, Springer International Publishing, Cham 2019 [Paper]

[Kah19b] Kaiser, T. K.; Hamann, H.: *Self-Organized Construction by Minimal Surprise*. To Appear: FAS-W 2019, 2019

[DGZ18] Divband Soorati, M.; Ghofrani, J.; Zahadat, P.; Hamann, H.: *Robust and Adaptive Robot Self-Assembly Based on Vascular Morphogenesis*. IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), 4282-4287, IEEE, Madrid 2018 [Paper]

[HMM18] Hamann, H.; Markarian, C.; Meyer auf der Heide F.; Wahby, M.: *Pick, Pack, & Survive: Charging Robots in a Modern Warehouse based on Online Connected Dominating Sets*. 9th Int. Conf. on Fun with Algorithms, 22:1--22:13, Schloss Dagstuhl--Leibniz-Zentrum für Informatik, La Maddalena, Italy 2018 [Abstract] [Paper]

[WHH18a] Wahby, M.; Heinrich, MK.; Hofstadtler, DN.; Zahadat, P.; Risi, S.; Ayres, P.; Schmickl T.; Hamann, H.: *A Robot to Shape your Natural Plant: The Machine Learning Approach to Model and Control Bio-Hybrid Systems*. Proceedings of the Genetic and Evolutionary Computation Conference (GECCO), 165--172, ACM, Kyoto, Japan 2018 [Abstract] [Paper]

[WHH18b] Wahby, M.; Heinrich, MK.; Hofstadler, DN.; Neufeld, N.; Kuksin, I.; Zahadat, P.; Schmickl, T.; Ayres, P.; Hamann, H.: *Autonomously Shaping Natural Climbing Plants: A Bio-hybrid Approach*. Royal Society Open Science, Royal Society Open Science, 2018 [Abstract] [Paper]

[BoH17] Borkowski, R.; Hamann, H.: *Evolving robot swarm behaviors by minimizing surprise: results of simulations in 2-d on a Torus*. The Genetic and Evolutionary Computation Conference 2017, 1679-1680, ACM, Berlin 2017 [Abstract] [Paper]

[HWH17] Hofstadler, D. N.; Wahby, M.; Heinrich, M. K.; Hamann, H.; Zahadat, P.; Ayres, P.; Schmickl, T.: *Evolved Control of Natural Plants: Crossing the Reality Gap for User-defined Steering of Growth and Motion*. ACM Transactions on Autonomous and Adaptive Systems (TAAS) - Special Issue on SASO 2016, Volume 12, Issue 3, Article No. 15, ACM, New York 2017 [Abstract] [Paper]

[KPV17] Khaluf, Y; Pinciroli, C.; Valentini, G.; Hamann, H.: *The Impact of Agent Density on Scalability in Collective Systems: Noise-Induced vs Majority-Based Bistability*. Swarm Intelligence, Volume 11, Issue 2, 155–179, Springer US, 2017 [Abstract] [Paper]

[VBP17] van Rooijen, L.; Bäumer, F.; Platenius, M. C.; Geierhos, M.; Hamann, H.; Engels, G.: *From User Demand to Software Service: Using Machine Learning to Automate the Requirements Specification Process*. Fourth International Workshop on Artificial Intelligence for Requirements Engineering (AIRE 17) workshop - in conjuction with RE 17, IEEE, Lisbon 2017 [Abstract] [Paper]

[WHH17] Wagner, D.; Hofmann, C.; Hamann, H.; von Mammen, S.: *Design and Exploration of Braiding Swarms in VR*. 23rd ACM Symposium on Virtual Reality Software and Technology, Article No. 13, ACM, Gothenburg 2017 [Abstract] [Paper]

[WVH17] Wever, M.; van Rooijen, L.; Hamann, H.: *Active Coevolutionary Learning of Requirements Specifications from Examples*. The Genetic and Evolutionary Computation Conference 2017, Berlin, ACM, 1327-1334 , ACM, Berlin 2017 [Abstract] [Paper]

[WVL17] Wever, M.; van Rooijen, L.; Hamann, H.: *Active Coevolutionary Learning of Requirements Specifications from Examples*. GECCO, 1327-1334, ACM, 2017 [Paper]

[HaV18] Hamann, H.; von Mammen, S.: *Swarm Robotics*. [Paper]

[KhH19] Khaluf, Y.; Hamann, H.: *Modulating Interaction Times in an Artificial Society of Robots*.

[KSH19] Khaluf, Y.; Simoens, P.; Hamann, H.: *The Neglected Pieces of Designing Collective Decision-Making Processes*. [Paper]

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