

## I. Publications

Selected articles published by outlets with scientific quality assurance, book publications, invited talks, and works accepted for publication but not yet published.

### Journals

1. S. Bosse, U. Engel, *Real-time Human-in-the-loop Simulation with Mobile Agents, Chat Bots, and Crowd Sensing for Smart Cities*, Sensors (MDPI), 2019, doi: 10.3390/s19204356
2. S. Bosse, D. Lehmus, *Material-integrated cluster computing in self-adaptive robotic materials using mobile multi-agent systems*, Cluster Computing, Volume 22, Number 3, pp. 1017-1037, doi 10.1007/s10586-018-02894-x, ISSN 1386-7857 (2019)
3. S. Bosse, *Modellierung und Simulation komplexer Systeme mit annotiertem JavaScript*, Industrie 4.0 Management, Intelligente vernetzte Systeme, 1.2019, GITO Verlag, ISSN 2364-9208
4. S. Bosse, D. Lehmus, *Adaptive Materialien mit Multigatentensystemen*, Industrie 4.0 Management, 4.2018, GITO Verlag, ISSN 2364-9208
5. S. Bosse. *Incremental Distributed Learning with JavaScript Agents for Earthquake and Disaster Monitoring*. In: International Journal of Distributed Systems and Technologies (IJDST) (2017)
6. S. Bosse, A. Lechleiter, *A hybrid approach for Structural Monitoring with self-organizing multi-agent systems and inverse numerical methods in material-embedded sensor networks*, Mechatronics, (2016), DOI:10.1016/j.mechatronics.2015.08.005.

## Conferences

7. S. Bosse, U. Engel, *Combining Crowd Sensing and Social Data Mining with Agent-based Simulation using Mobile Agents towards Augmented Virtuality*, Social Simulation Conference, 23-27.9.2019, Mainz, Germany
8. S. Bosse, *Smart Micro-scale Energy Management and Energy Distribution in Decentralized Self-Powered Networks Using Multi-Agent Systems*, FedCSIS Conference, 6th International Workshop on Smart Energy Networks & Multi-Agent Systems, 9-12.9.2018, Poznan, Poland, 2018
9. S. Bosse, M. Koerdt and A. v. Hehl, *Robust and Adaptive Non Destructive Testing of Hybrids with Guided Waves and Learning Agents*, 3. Internationale Konferenz Hybrid Materials and Structures (2018) 18-19.4.2018, Bremen, Germany
10. S. Bosse, *A Unified System Modelling and Programming Language based on JavaScript and a Semantic Type System*, Procedia Manufacturing, Volume 24, 2018, Pages 21-39, Proc. of the 4th International Conference on System-Integrated Intelligence Conference, Hanover, Germany, DOI: 10.1016/j.promfg.2018.06.005
11. S. Bosse, U. Engel, *Augmented Virtual Reality: Combining Crowd Sensing and Social Data Mining with Large-Scale Simulation Using Mobile Agents for Future Smart Cities*, Proceedings, Volume 4, ECSA-5 5th International Electronic Conference on Sensors and Applications 15–30 November, 2018 DOI 10.3390/ecsa-5-05762

## Books

12. S. Bosse, D. Lehnhus, W. Lang, M. Busse (Ed.), *Material-Integrated Intelligent Systems: Technology and Applications*, Wiley, ISBN: 978-3-527-33606-7 (2018)
13. S. Bosse, *Unified Distributed Sensor and Environmental Information Processing with Multi-Agent Systems: Models, Platforms, and*

*Technological Aspects*, ISBN 9783746752228, epubli, (2018)

### Invited Talks

14. S. Bosse, *Überblicksvortrag und praktische Erfahrungen zur Anwendung von Maschinellen Lernalgorithmen auf SHM/NDT Daten*, FA SHM 27. Sitzung, UA GW 4. Sitzung, 15.10.2019, Berlin, Germany
15. S. Bosse, *Robust damage detection in hybrid materials using external Monitoring and Machine Learning - Live Demonstration using Multi-domain Simulation*, Invited Talk, FA Hybride Werkstoffe und Strukturen, AK Mischverbindungen of the FA Aluminium, 1.10.2019, Düsseldorf, Germany
16. S. Bosse, *Smarte Adaptive Materialien und Agenten*, Invited Talk, AWT - VDI - Arbeitskreis Werkstofftechnik Bremen 2018/19, 06.03. 2019, Leibniz-Institut für Werkstofforientierte Technologien - IWT, Bremen, Germany
17. S. Bosse, *Data mining with Machine Learning for the Social Sciences*, Invited Keynote Talk, 18.5.2018, Bremen, Computational Social Sciences Talks, BIGSSS, SOCIUM, University of Bremen, Jacobs University Bremen, 2018

### II. Lectures

Lectures held as a Privatdozent at the University of Bremen and Professor at the University of Koblenz-Landau, Germany.

18. S. Bosse, *Multi-agent Systems: Programming, Architectures, Platforms*, University of Koblenz-Landau (SoSe) and University of Bremen
19. S. Bosse, *Distributed and Parallel Programming*, University of Koblenz-Landau (SoSe)
20. S. Bosse, *Crowd Sensing and Social Data Mining using Mobile Agents*, University of Koblenz-Landau (WiSe)

21. S. Bosse, *Parallel and Distributed Embedded Systems*, University of Bremen (SoSe)
22. S. Bosse, *Introduction to Functional Programming*, University of Koblenz-Landau (SoSe)
23. S. Bosse, *Design of Embedded Systems with Digital Logic*, University of Bremen (WiSe)
24. S. Bosse, *Material-integrated Sensorial Systems*, University of Bremen (WiSe)