Appendix R

Publications and References

epubli, ISBN 9783746752228 (2018)

R.1 Publications

To clearly distinguish self references providing the content of this work from external references the reference label starts always with the initials of the author of this work, regardless of first or second level authorship.

[BOS17A] S. Bosse, E. Pournaras, *An Ubiquitous Multi-Agent Mobile Platform for Distributed Crowd Sensing and Social Mining*, FiCloud 2017: The 5th International Conference on Future Internet of Things and Cloud,Aug 21, 2017 - Aug 23, 2017, Prague, Czech Republic.

[[BOS17B] S. Bosse, D. Lehmhus, *Towards Large-scale Material-integrated Computing: Self-Adaptive Materials and Agents*, The 3rd International Workshop on Data-driven Self-regulating Systems (DSS 2017), 18-22 September 2017, University of Arizona, Tucson, AZ

[BOS17C] S. Bosse, *Incremental Distributed Learning with JavaScript Agents for Earthquake and Disaster Monitoring*, International Journal of Distributed Systems and Technologies (IJDST), (2017), IGI-Global, Vol. 8, Issue 4, DOI: 10.4018/IJDST.2017100103

[BOS16C] S. Bosse, Distributed Machine Learning with Self-organizing Mobile Agents for Earthquake Monitoring, IEEE 1st International Workshops on Foundations and Applications of Self Systems (FASW), SASO Conference, DSS Workshop, 12 September 2016, Augsburg, Germany, 2016, 2016, DOI:10.1109/FAS-W.2016.38.

[BOS16B] S. Bosse. A. Lechleiter, Structural Monitoring with Distributed-Regional and Event-based NN-Decision Tree Learning using Mobile Multi-Agent Systems and common JavaScript platforms, Proc. of the SysInt 2016, Proc. Technol., DOI: 10.1016/j.protcy.2016.08.063

[BOS16A] S. Bosse, *Mobile Multi-Agent Systems for the Internet-of-Things and Clouds using the JavaScript Agent Machine Platform and Machine Learning as a Service*, The IEEE 4th International Conference on Future Internet of Things and Cloud, 22-24 August 2016, Vienna, Austria, 2016, 2016, DOI:10.1109/FiCloud.2016.43.

[BOS15A] S. Bosse, *From the Internet-of-Things to Sensor Clouds - Unified Distributed Computing in Heterogeneous Environments with Smart and Mobile Multi-Agent Systems*, Proc. of the Smart Systems Integration Conference 2015, 11-12 March 2015, Copenhagen, Denmark

[BOS15B] S. Bosse, *Design and Simulation of Material-integrated Distributed Sensor Processing with a Code-based Agent Platform and mobile Multi-Agent Systems*, MDPI Sensors 2015, 15(2), 4513-4549; doi:10.3390/s150204513, ***Invited Publication***

[BOS15C] S. Bosse, *A Unified Distributed Computing Framework with Mobile Multi-Agent Systems and Virtual Machines For Large-Scale Applications: From the Internet-of-Things to Sensor Clouds*, 11th Workshop on Agent Based Computing: from Model to Implementation (ABC:MI'15), Lodz, Poland, September 13-16, 2015, accepted as position paper

[BOS15D] S. Bosse, *Unified Distributed Computing and Co-ordination in Pervasive/*

Ubiquitous Networks with Mobile Multi-Agent Systems using a Modular and Portable Agent Code Processing Platform, in The 6th International Conference on Emerging Ubiquitous Systems and Pervasive Networks (EUSPN 2015), Procedia Computer Science, 2015

[BOS14A] S. Bosse, *Distributed Agent-based Computing in Material-Embedded Sensor Network Systems with the Agent-on-Chip Architecture*, IEEE Sensors Journal, Special Issue on Material-integrated Sensing, DOI 10.1109/JSEN.2014.2301938, ***Top 25 Download Ranking IEEE Sensors May/June/August 2014***

[BOS14B] S. Bosse, *Design of Material-integrated Distributed Data Processing Platforms with Mobile Multi-Agent Systems in Heterogeneous Networks*, Proc. of the 6'th International Conference on Agents and Artificial Intelligence ICAART 2014. DOI:10.5220/0004817500690080, ***Nominated for Best Paper Award***

[BOS14C] S. Bosse, A. Lechleiter, *Structural Health and Load Monitoring with Material-embedded Sensor Networks and Self-organizing Multi-Agent Systems*, SysInt 2014, 2nd International Conference on System-Integrated Intelligence, Procedia Technology, Elsevier, DOI: 10.1016/j.protcy.2014.09.039

[BOS14D] S. Bosse, *Processing of Mobile Multi-Agent Systems with a Code-based Agent Platform in Material-Integrated Distributed Sensor Networks*, 1st International e-conference on Sensors and Applications, Section D: Sensor Networks, 2014, 2014, DOI:10.3390/ecsa-1-d010, ***Best Presentation and Paper Award in Sensor Networks Topic***

[BOS14E] S. Bosse, *Design and Simulation of a Low-Resource Processing Platform for Mobile Multi-Agent Systems in Distributed Heterogeneous Networks*, LNAI 2015, Springer, under publicaton, ***Invited Paper***

[BOS14F] 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*, Elsevier Mechatronics Journal, ***Invited Publication***, under review

[BOS14G] D. Lehmhus, S. Bosse, W. Lang, P.C. Chao, F. Chang, *Guest Editorial Special Issue on Material-Integrated Sensing, Data Processing and Communication* (Article), IEEE Sensors, 14 (7), 2014, DOI:10.1109/JSEN.2014.2330133.

[BOS13A] S. Bosse, *Intelligent Microchip Networks: An Agent-on-Chip Synthesis Framework for the Design of Smart and Robust Sensor Networks*, SPIE 2013, Microtechnologie Conference, Session EMT 102 VLSI Circuits and Systems, 24-26 April 2013, Alpexpo/Grenoble, France, DOI:10.1117/12.2017224

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[BOS13C] T. Behrmann, C. Budelmann, S. Bosse, D. Lehmhus, M. C. Lemmel, *Tool chain for harvesting, simulation and management of energy in Sensorial Materials*, Journal of Intelligent Material Systems and Structures, 2013, DOI:10.1177/1045389X 13488248, ***Invited Publication***.

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iour supported by a Smart Sensorial Material and Agent Systems, Proceedings of the Smart Systems Integration Conference SSI 2013, Topic 5, Amsterdam NL, 13-14.3.2013, 2013, ISBN: 978-3-8007-3490-0

[BOS12A] S. Bosse, F. Pantke, *Distributed computing and reliable communication in sensor networks using multi-agent system*, Production Engineering, Research and Development, 2012, ISSN: 0944-6524, DOI:10.1007/s11740-012-0420-8, ***Invited Publication***.

[BOS12B] S. Bosse, F. Pantke, F. Kirchner, *Distributed Computing in Sensor Networks Using Multi-Agent Systems and Code Morphing*, Proceedings of the 11th International Conference on Artificial Intelligence and Soft Computing Conference ICAISC 2012, 29.4. – 3.5.2012, Zakapone, Poland

[BOS12C] S. Bosse, F. Pantke, F. Kirchner, *Data Processing and Communication in Distributed Low-power Sensor Networks using Multi-agent Systems*, 1st Joint Symposium on System-integrated Intelligence: New Challenges for Product and Production Engineering, Special Session Enabling Technologies for Sensorial Materials – Taking sensor integration, June 27th – 29th 2012: Hannover, Germany

[BOS12D] K. Tracht, S. Hogreve, S. Bosse, *Intelligent Interpretation of Multiaxial Gripper Force Sensors*, Proceedings of CIRP Conference on Assembly Technologies, CATS 2012

[BOS12E] S. Bosse, F. Kirchner, *Smart Energy Management and Energy Distribution in Decentralized Self-Powered Sensor Networks Using Artificial Intelligence Concepts*, Proceedings of the Smart Systems Integration Conference 2012, Session 4, Zürich, Schweiz, 22 - 23 Mar. 2012, ISBN 978-3-8007-3423-8

[BOS12F] F. Pantke, S. Bosse, D. Lehmhus, M. Lawo, M. Busse, *Combining Simulation and Machine-Learning for Real-Time Load Identification in Sensorial Materials*, Proceedings of the International Conference SIMBIO-M-2011, Simulations in BIO-Sciences and Multiphysics, 20-22.6.2011, Marseille, France, 2011.

[BOS11A] S. Bosse, *Hardware-Software-Co-Design of Parallel and Distributed Systems Using a unique Behavioural Programming and Multi-Process Model with High-Level Synthesis*, Proceedings of the SPIE Microtechnologies 2011 Conference, 18.4.-20.4.2011, Prague, Session EMT 102 VLSI Circuits and Systems, DOI 10.1117/12.888122

[BOS11B] S. Bosse, T. Behrmann, *Smart Energy Management and Low-Power Design of Sensor and Actuator Nodes on Algorithmic Level for Self-Powered Sensorial Materials and Robotics*, Proceedings of the SPIE Microtechnologies 2011 Conference, 18.4.-20.4.2011, Prague, Session EMT 101 Smart Sensors, Actuators and MEMS, 2011, DOI:10.1117/12.888124

[BOS11C] F. Pantke, S. Bosse, D. Lehmhus, M. Lawo, *An Artificial Intelligence Approach Towards Sensorial Materials,* Proceedings of the Future Computing 2011 Conference, DOI 10.13140/2.1.3124.0647, ***Best Paper Award***

[BOS10A] S. Bosse, *Hardware Synthesis of Complex System-on-Chip-Designs for Embedded Systems Using a Behavioural Programming and Multi-Process Model*, Proceedings of the 55th IWK – Internationales Wissenschaftliches Kolloquium, Session C4, Ilmenau, 13 – 17 Sept. 2010, 2010.

[BOS10B] S. Bosse, *System-On-Chip Design and Communication in Embedded Wired*

High-Density Sensor Networks: A Contribution from Behavioural High-Level Synthesis and Functional Printing, E-MRS 2010 Spring Meeting, June 7-11, 2010, Congress Center, Strasbourg, France, 2010

[BOS10C] S. Bosse, D. Lehmhus, *Smart Communication in a Wired Sensor- and Actuator-Network of a Modular Robot Actuator System using a Hop-Protocol with Delta-Routing*, Proceedings of the Smart Systems Integration conference, Como, Italy, 23-24.3.2010 (2010), 2010, ISBN: 978-3-8007-3208-1.

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R.2 Lectures

(All lectures are held at the University of Bremen.)

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[PARSYS] S. Bosse, *Hardware-Entwurf von parallelen und verteilten Systemen mit FPGAs und Logik- und Highlevel-Synthese*, SWS: 4, ECTS: 6, VAK 03-ME-712.06

[MISS] S. Bosse, D. Lehmhus, *Material-integrierte Sensorische Systeme*, SWS: 4, ECTS: 6, VAK 04-M10-2-PT08

[GDI] F. Kirchner, S. Bosse, *Grundlagen der Informatik I+II*, SWS: 3, ECTS: 4 , VAK 01-B-GDI-1/2

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R.3 Supervised Thesises

(Selection)

[BEN13] S. Bonucelli, *Agent-Based Routing Algorithms for a Wired Sensor Network*, Master Thesis, University of Bremen and Università degli Studi di Genova Scuola Politecnica, MsC Electrical Engineering, ***VDI Award***, 2013

[TAS13] A. Tassi, Low-power design and energy management with agents at micro-chip level in autonomous distributed sensor networks, Master Thesis, University of Bremen and and Università degli Studi di Genova Scuola Politecnica, MsC Electrical Engineering, 2013

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