



**INF**

**FAKULTÄT FÜR  
INFORMATIK**

# **Publikationsbericht 2019**

**Fakultät für Informatik**

# FAKULTÄT FÜR INFORMATIK

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## 1. LEITUNG

Prof. Dr.-Ing. Andreas Nürnberger (Dekan)

Prof. Dr.rer.nat.habil. Stefan Schirra (Prodekan)

Prof. Dr.-Ing. habil. Bernhard Preim (Studiendekan) bis 30.09.2018

Prof. Dr. Mesut Günes (Studiendekan) ab 01.10.2018

## 2. VERÖFFENTLICHUNGEN

### BEGUTACHTETE BUCHBEITRÄGE

**Dubost, Florian; Dünnwald, Max; Huff, Denver; Scheumann, Vincent; Schreiber, Frank; Vernooij, Meike; Niessen, Wiro J.; Skalej, Martin; Schreiber, Stefanie; Oeltze-Jafra, Steffen; Bruijne, Marleen**  
Automated quantification of enlarged perivascular spaces in clinical brain MRI across sites  
OR 2.0 Context-Aware Operating Theaters and Machine Learning in Clinical Neuroimaging - Cham: Springer;  
Zhou, Luping, S. 103-111, 2019;

### HABILITATIONEN

**Schulze, Sandro; Saake, Gunter [AkademischeR BetreuerIn]**

Analysis techniques to support the evolution of variant-rich software systems  
Magdeburg, 2019, xvi, 70 Seiten, Diagramme, 30 cm;  
[Literaturverzeichnis: Seite 65-70]

### DISSERTATIONEN

**Broneske, David; Saake, Gunter**

Accelerating mono and multi-column selection predicates in modern main-memory database systems  
Magdeburg, ;  
Dissertation Otto-von-Guericke-Universität Magdeburg, Fakultät für Informatik 2019, xx, 138 Seiten, Diagramme,  
30 cm [Literaturverzeichnis: Seite 125-138]

**Hielscher, Tommy; Spiliopoulou, Myra [AkademischeR BetreuerIn]; Preim, Bernhard [AkademischeR BetreuerIn]**

Exploiting background knowledge on evolving objects to identify relevant dimensions for classification  
Magdeburg, 2019, xv, 137 Seiten, Diagramme, 30 cm;  
[Literaturverzeichnis: Seite 121-135]

**König, Tim; Tönnies, Klaus [AkademischeR BetreuerIn]**

Computer-assisted image registration for HDR brachytherapy of the liver in MRI  
Magdeburg, 2019, xiv, 101 Seiten, Illustrationen, Diagramme, 30 cm;  
[Literaturverzeichnis: Seite 91-101]

**Meinicke, Jens; Saake, Gunter**

Variational debugging - understanding differences among executions

Magdeburg, ;

Dissertation Otto-von-Guericke-Universität Magdeburg, Fakultät für Informatik 2019, x, 100 Seiten, Diagramme, 30 cm [Literaturverzeichnis: Seite 85-100]

**Meuschke, Monique; Preim, Bernhard [AkademischeR BetreuerIn]**

Visualization, classification, and interaction for risk analysis and treatment planning of cerebral aneurysms

Magdeburg, 2019, 220 Seiten, Illustrationen, Diagramme, 30 cm;

[Literaturverzeichnis: Seite 189-217]

**Mewes, André; Hansen, Christian [AkademischeR BetreuerIn]**

Projector-based augmented reality and touchless interaction to support MRI-guided interventions

Magdeburg, 2019, viii, 163 Seiten, Illustrationen, Diagramme, 30 cm;

[Literaturverzeichnis: Seite 127-152]

**Müller, Hendrik; Turowski, Klaus [AkademischeR BetreuerIn]; Saake, Gunter [AkademischeR BetreuerIn]**

Multi-dimensional server consolidation for commercial off-the-shelf enterprise applications using shared performance counters

Magdeburg, 2019, xvi, 190 Seiten, Illustrationen, Diagramme, 30 cm;

[Literaturverzeichnis: Seite 167-187]

**Nguyen, Tuan Tran; Kruse, Rudolf [AkademischeR BetreuerIn]; Zug, Sebastian [AkademischeR BetreuerIn]**

A reliability-aware fusion concept toward robust ego-lane estimation incorporating multiple sources

Wiesbaden: Springer, 2020, XIX, 164 Seiten, Illustrationen, 21 cm - (AutoUni Schriftenreihe; Band 140);

[Literaturverzeichnis: Seite 121-136]

**Zille, Heiner; Mostaghim, Sanaz [AkademischeR BetreuerIn]**

Large-scale multi-objective optimisation - new approaches and a classification of the state-of-the-art

Magdeburg, 2019, 241 Seiten, Illustrationen;

[Literaturverzeichnis: Seite 179-188]

# INSTITUT FÜR INTELLIGENTE KOOPERIERENDE SYSTEME

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## 1. LEITUNG

Prof. Dr. rer. nat. Frank Ortmeier (geschäftsführende Leitung)  
Prof. Dr.-Ing. habil. Till Mossakowski  
Prof. Dr. rer. nat. Mesut Günes

Sebastian Nielebock, M.Sc.  
Dipl.-Inform. Michael Preuß

## 2. VERÖFFENTLICHUNGEN

### BEGUTACHTETE ZEITSCHRIFTENAUFsätze

**Bashkanov, Oleksii; Seidel, Martin; Yakymets, Maksym; Daupayev, Nursultan; Sharonov, Yevhen; Assmann, Tom; Schmidt, Stephan; Zug, Sebastian**  
Exploiting OpenStreetMap-Data for outdoor robotic applications  
IEEE Xplore digital library - New York, NY: IEEE, insges. 7 S., 2019;  
[Konferenz: 2019 IEEE International Symposium on Robotic and Sensors Environments (ROSE), 17.-18. June 2019, Ottawa, ON, Canada]

**Couso, Ines; Borgelt, Christian; Hullermeier, Eyke; Kruse, Rudolf**  
Fuzzy sets in data analysis - from statistical foundations to machine learning  
IEEE computational intelligence magazine - New York, NY [u.a.]: IEEE, Bd. 14.2019, 1, S. 31-44  
[Imp.fact.: 5.857]

**Fuentealba, Patricio; Illanes, Alfredo; Ortmeier, Frank**  
Cardiotocographic signal feature extraction through CEEMDAN and time-varying autoregressive spectral-based analysis for fetal welfare assessment  
IEEE access - New York, NY: IEEE, 2019;  
[Online first]  
[Imp.fact.: 4.098]

**Fuentealba, Patricio; Illanes, Alfredo; Ortmeier, Frank**  
Foetal heart rate assessment by empirical mode decomposition and spectral analysis  
Current directions in biomedical engineering - Berlin: De Gruyter, Bd. 5.2019, 1, S. 381-383;  
[Imp.fact.: 0.377]

**Mossakowski, Till; Diaconescu, Razvan; Glauer, Martin**  
Towards fuzzy neural conceptors  
Journal of applied logics - IfCoLoG journal of logics and their applications - London: College Publications, Bd. 6.2019, 4, S. 725-744

**Neufeld, Xenija; Mostaghim, Sanaz; Sancho-Pradel, Dario; Brand, Sandy**

Building a planner - a survey of planning systems used in commercial video games  
IEEE transactions on games - New York, NY: IEEE, Bd. 11.2019, 2, S. 91-108;  
[Imp.fact.: 1.113]

**Nielebock, Sebastian; Heumüller, Robert; Ortmeier, Frank**

Programmers do not favor lambda expressions for concurrent object-oriented code  
Empirical software engineering: an international journal - Dordrecht [u.a.]: Springer Science + Business Media B.V, 1996, Bd. 24.2019, 1, S. 103-138;  
[Online first]  
[Imp.fact.: 2.933]

**Raza, Saleem; Faheem, Muhammad; Guenes, Mesut**

Industrial wireless sensor and actuator networks in industry 4.0 - exploring requirements, protocols, and challenges-A MAC survey  
International journal of communication systems - Chichester: Wiley, 2019, article e4074, insgesamt 32 Seiten;  
[Online first]  
[Imp.fact.: 1.278]

**Vahid, Amirali; Bluschke, Annet; Roessner, Veit; Stober, Sebastian; Beste, Christian**

Deep learning based on event-related EEG differentiates children with ADHD from healthy controls  
Journal of Clinical Medicine - Basel: MDPI, Volume 8, issue 7 (2019), article 1055, insgesamt 15 Seiten;  
[Imp.fact.: 5.688]

## NICHT BEGUTACHTETE ZEITSCHRIFTENAUFsätze

**Krug, Andreas; Stober, Sebastian**

Visualizing deep neural networks for speech recognition with learned topographic filter maps  
De.arxiv.org - [S.l.]: Arxiv.org, 2019, article 1912.04067, insgesamt 8 Seiten;  
[Workshop: 2019 ACL Workshop BlackboxNLP: Analyzing and Interpreting Neural Networks for NLP, Florence, 28.07. - 02.08.2019]

## BEGUTACHTETE BUCHBEITRäge

**Aldoj, Nader; Biavati, Federico; Rutz, Miriam; Michallek, Florian; Stober, Sebastian; Dewey, Marc**

Automatic prostate and prostate zones segmentation of magnetic resonance images using convolutional neural networks  
Medical Imaging with Deep Learning - OpenReview.net , 2019, S. 1-4 ;  
[Konferenz: Medical Imaging with Deep Learning, MIDL 2019, London, 8-10 July 2019]

**Bartashevich, Palina; Mostaghim, Sanaz**

Benchmarking collective perception - new task difficulty metrics for collective decision-making  
Progress in Artificial Intelligence - Cham: Springer, S. 699-711, 2019 - (Lecture Notes in Computer Science; vol.11805);  
[EPIA 2019, Vila Real, Portugal, 03.-06.09.2019]

**Bartashevich, Palina; Mostaghim, Sanaz**

Ising model as a switch voting mechanism in collective perception  
Progress in Artificial Intelligence - Cham: Springer, S. 617-629, 2019 - (Lecture Notes in Computer Science; vol.11805);  
[EPIA 2019, Vila Real, Portugal, 03.-06.09.2019]

**Bartashevich, Palina; Mostaghim, Sanaz**

Positive impact of isomorphic changes in the environment on collective decision-making  
GECCO'19 - New York, New York: The Association for Computing Machinery, S. 105-106, 2019;  
[Konferenz: Genetic and Evolutionary Computation Conference Companion, GECCO '19, Prague, Czech Republic, July 13 - 17, 2019]

**Codescu, Mihai; Krieg-Brückner, Bernd; Mossakowski, Till**

Extensions of generic DOL for generic ontology design patterns  
CEUR workshop proceedings - Aachen: RWTH, Volume 2518 (2019), paper WOMOCOE1, insgesamt 12 Seiten;  
[Workshop: 4th International Workshop on Ontology Modularity, Contextuality, and Evolution, WOMoCoE, Graz, Austria, 2019]

**Dockhorn, Alexander; Lucas, Simon M.; Volz, Vanessa; Bravi, Ivan; Gaina, Raluca D.; Perez-Liebana, Diego**

Learning local forward models on unforgiving games  
2019 IEEE Symposium on Computational Intelligence and Games (CIG'19) - Piscataway, NJ : IEEE , 2019, S. 1-4 ;  
[Konferenz: 2019 IEEE Conference on Games, CoG, London, United Kingdom, 20-23 August 2019]

**Dockhorn, Alexander; Schwensfeier, Tony; Kruse, Rudolf**

Fuzzy multiset clustering for metagame analysis  
Proceedings of the 11th Conference of the European Society for Fuzzy Logic and Technology (EUSFLAT 2019) - Atlantis Press , 2019 ; Novák, Vilém, S. 536-543 ;  
[Konferenz: 11th Conference of the European Society for Fuzzy Logic and Technology, EUSFLAT 2019, Prague, Czech Republic, September 9-13, 2019]

**Engel, Christoph; Mencke, Steffen; Heumüller, Robert; Ortmeier, Frank**

Companion specifications for smart factories - from machine to process view  
Smart SysTech 2019 - Berlin: VDE VERLAG, S. 61-68;  
[Konferenz: Smart SysTech 2019, 4-5 June 2019, Magdeburg, Germany]

**Engelhardt, Frank; Günes, Mesut**

Modeling delay of haptic data in CSMA-based wireless multi-hop networks - a probabilistic approach  
IEEE 30th Annual International Symposium on Personal, Indoor, and Mobile Radio Communications (PIMRC Workshops) - [Piscataway, NJ]: IEEE, S. 1-6, 2019;

**Engelhardt, Frank; Rong, Chenke; Günes, Mesut**

Towards tactile wireless multi-hop networks - the tactile coordination function as EDCA supplement  
2019 Wireless Telecommunications Symposium - [Piscataway, NJ]: IEEE, S. 1-7;  
[2019 Wireless Telecommunications Symposium (WTS), New York, 9-12 April 2019]

**Filax, Marco; Gonschorek, Tim; Ortmeier, Frank**

Data for image recognition tasks - an efficient tool for fine-grained annotations  
Proceedings of the 8th International Conference on Pattern Recognition Applications and Methods. Volume 1 - [Setúbal]: SCITEPRESS - Science and Technology Publications, Lda., S. 900-907, 2019;  
[Konferenz: 8th International Conference on Pattern Recognition Applications and Methods, February 19-21, 2019, Prague, Czech Republic]

**Fritzsche, Kerstin; Niehoff, Silke; Krug, Andreas**

Digitale Technologien für den Umweltschutz - wie Künstliche Intelligenz und Big Data die Umwelt-Governance verbessern können  
Was Bits und Bäume verbindet - München: oekom verlag, S. 65-68, 2019

**Fuentealba, Patricio; Illanes, Alfredo; Ortmeier, Frank**

Cardiotocograph data classification improvement by using empirical mode decomposition\*  
2019 41st Annual International Conference of the IEEE Engineering in Medicine and Biology Society - [Piscataway, NJ]: IEEE, S. 5646-5649;  
[Konferenz: 41st Annual International Conference of the IEEE Engineering in Medicine and Biology Society, EMBC, Berlin, Germany, 23-27 July 2019]

**Fuentealba, Patricio; Illanes, Alfredo; Ortmeier, Frank**

Spectral-based analysis of progressive dynamical changes in the fetal heart rate signal during labor by using empirical mode decomposition  
Computing in Cardiology, September 23-26, 2018, Maastricht, the Netherlands - Piscataway, NJ: IEEE, S. 1-4, 2019;  
[2018 Computing in Cardiology Conference, CinC, Maastricht, Netherlands, 23-26 September 2018]

**Glauer, Martin; Mossakowski, Till**

Institutions for SQL database schemas and datasets

Recent Trends in Algebraic Development Techniques - Cham: Springer; Fiadeiro, José Luiz, S. 67-86, 2019 - (Lecture Notes in Computer Science; volume 11563);

[Workshop: 24th IFIP WG 1.3 International Workshop, WADT 2018, Egham, UK, July 2-5, 2018]

**Gonschorek, Tim; Bergt, Philipp; Filax, Marco; Ortmeier, Frank**

Integrating safety design artifacts into system development models using SafeDeML

Model-Based Safety and Assessment - Cham: Springer; Papadopoulos, Yiannis, S. 93-106, 2019 - (Lecture Notes in Computer Science; volume 11842);

[Symposium: 6th International Symposium, IMBSA 2019, Thessaloniki, Greece, October 16-18, 2019]

**Gonschorek, Tim; Bergt, Philipp; Filax, Marco; Ortmeier, Frank; Hoyningen-Hüne, Jan; Piper, Thorsten**

SafeDeML: on integrating the safety design into the system model

Computer Safety, Reliability, and Security - Cham: Springer, S. 271-285, 2019 - (Programming and Software Engineering; 11698);

[Konferenz: 38th International Conference, SAFECOMP 2019, Turku, Finland, September 11-13, 2019]

**Heibig, Mardé; Zille, Heiner; Javadi, Mahrokh; Mostaghim, Sanaz**

Performance of dynamic algorithms on the dynamic distance minimization problem

GECCO'19 - New York, New York: The Association for Computing Machinery, S. 205-206, 2019;

[Konferenz: Genetic and Evolutionary Computation Conference Companion, GECCO '19, Prague, Czech Republic, July 13 - 17, 2019]

**Heumüller, Robert; Nielebock, Sebastian; Ortmeier, Frank**

SpecTackle - a specification mining experimentation platform

SEAA 2019 - Piscataway, NJ: IEEE; Staron, Mirosław, S. 178-181;

[Konferenz: 45th Euromicro Conference on Software Engineering and Advanced Applications, SEAA, Kallithea-Chalkidiki, Greece, 28-30 August 2019]

**Javadi, Mahrokh; Zille, Heiner; Mostaghim, Sanaz**

Modified crowding distance and mutation for multimodal multi-objective optimization

GECCO'19 - New York, New York: The Association for Computing Machinery, S. 211-212, 2019;

[Konferenz: Genetic and Evolutionary Computation Conference Companion, GECCO '19, Prague, Czech Republic, July 13 - 17, 2019]

**Junge, Lars; Schmidt, Michael; Zug, Sebastian; Schmidt, Sebastian**

Entwicklung eines Lenk- und Bremssystems für automatisierte Lastenräder

14. Magdeburger Maschinenbau-Tage 2019 - Magdeburger Ingenieurtag - 24. und 25. September 2019 : Tagungsband - Magdeburg: Otto von Guericke Universität Magdeburg, Fakultät Maschinenbau, Institut für Mobile Systeme - Lehrstuhl Mechatronik, S. 19-28;

[Tagung: 14 MMT 2019, 24. und 25. September 2019, Magdeburg]

**Katterfeld, André; Richter, Christian; Fessel, Karl; Ajmal, Mohsin; Schwandtke, Rolf; Chumachenko, Yevgeniy**

3iS - intelligent IoT idler stations for the identification of damaged idler bearings

Conference proceedings - Barton: Institution of Engineers Australia, insges. 10 S., 2019;

[Kongress: ICBMH 2019, 09-11 July 2019, Gold Coast, Queensland, Australia]

**Knaebel, René; Stede, Manfred; Stober, Sebastian**

Window-based neural tagging for shallow discourse argument labeling

CoNLL 2019 - Stroudsburg: Association for Computational Linguistics, S. 768-777;

[Konferenz: 23rd Conference on Computational Natural Language Learning, CoNLL 2019, Hong Kong, China, November 3-4, 2019]

**Krieg-Brückner, Bernd; Mossakowski, Till**

Generic ontology design patterns at work

CEUR workshop proceedings - Aachen: RWTH, Volume 2518 (2019), paper BOG2, insgesamt 13 Seiten;

[Workshop: 2nd International Workshop on Bad Or Good Ontology, BOG, Graz, Austria, 2019]

**Low, Thomas; Hentschel, Christian; Polley, Sayantan; Das, Anustup; Sack, Harald; Nürnberger, Andreas; Stober, Sebastian**

The ISMIR explorer - a visual interface for exploring 20 years of ISMIR publications

ISMIR 2019 - International Society for Music Information Retrieval; Flexer, Arthur, S. 754-760;

[Konferenz: 20th International Society for Music Information Retrieval Conference, ISMIR 2019, Delft, The Netherlands, November 4 - 8, 2019]

**Lucas, Simon M.; Dockhorn, Alexander; Volz, Vanessa; Bamford, Chris; Gaina, Raluca D.; Bravi, Ivan; Perez-Liebana, Diego; Mostaghim, Sanaz; Kruse, Rudolf**

A local approach to forward model learning - results on the game of life game

2019 IEEE Conference on Computational Intelligence and Games (CIG'19) - Piscataway, NJ : IEEE , 2019, S. 1-8 ;

[Konferenz: 2019 IEEE Conference on Games, CoG, London, United Kingdom, 20-23 August 2019]

**Mai, Sebastian; Zille, Heiner; Steup, Christoph; Mostaghim, Sanaz**

Multi-objective collective search and movement-based metrics in swarm robotics

GECCO'19 - New York, New York: The Association for Computing Machinery, S. 387-388, 2019;

[Konferenz: Genetic and Evolutionary Computation Conference Companion, GECCO '19, Prague, Czech Republic, July 13 - 17, 2019]

**Mai, Sebastian; Zille, Heiner; Steup, Christoph; Mostaghim, Sanaz**

Online optimization of movement cost for robotic applications of PSO

Progress in Artificial Intelligence - Cham: Springer, S. 307-318, 2019 - (Lecture Notes in Computer Science; vol.11805);

[EPIA 2019, Vila Real, Portugal, 03.-06.09.2019]

**Nguyen, Tran Tuan; Perschewski, Jan-Ole; Engel, Fabian; Kruesemann, Jonas; Sitzmann, Jonas; Spehr, Jens; Zug, Sebastian; Kruse, Rudolf**

Reliability-aware and robust multi-sensor fusion toward ego-lane estimation using artificial neural networks

Information Quality in Information Fusion and Decision Making - Cham : Springer , 2019, S. 423-454

**Ofner, André; Stober, Sebastian**

Hybrid variational predictive coding as a bridge between human and artificial cognition

ALIFE 2019 - Cambridge: MIT Press; Fellermann, Harold, S. 68-69;

[Konferenz: Conference on Artificial Life, ALIFE 2019, Newcastle, United Kingdom, July 29 - August 2, 2019]

**Raza, Saleem; Lee, Tim; Exarchakos, George; Günes, Mesut**

A reliability analysis of TSCH protocol in a mobile scenario

CCNC 2019: 2019 16th IEEE Annual Consumer Communications & Networking Conference (CCNC): 2019 16th IEEE Annual Consumer Communications & Networking Conference (CCNC) took place 11-14 January 2019 in Las Vegas, NV, USA/ IEEE CCNC - Piscataway, NJ: IEEE;

**Weise, Jens; Benkhardt, Steven; Mostaghim, Sanaz**

Graph-based multi-objective generation of customised wiring harnesses

GECCO'19 - New York, New York: The Association for Computing Machinery, S. 407-408, 2019;

[Konferenz: Genetic and Evolutionary Computation Conference Companion, GECCO '19, Prague, Czech Republic, July 13 - 17, 2019]

**Zille, Heiner; Mostaghim, Sanaz**

Linear search mechanism for multi- and many-objective optimisation

Evolutionary multi-criterion optimization - 10th international conference, EMO 2019, East Lansing, MI, USA, March 10-13, 2019 : proceedings - Cham: Springer International Publishing, S. 399-410, 2019 - (Lecture notes in computer science; 11411);

[Konferenz: 10th International Conference, EMO 2019, East Lansing, MI, USA, March 10-13, 2019]

**Zug, Sebastian; Schmidt, Stephan; Assmann, Tom; Krause, Karen; Salzer, Sigrid; Seidel, Martin; Schmidt, Michael; Fessel, Karl**

BikeSharing-System der 5. Generation - Szenarien und Herausforderungen für den Einsatz autonom agierender Fahrräder

Smart Cities/Smart Regions Technische, wirtschaftliche und gesellschaftliche Innovationen - Wiesbaden: Springer Vieweg, S. 189-202, 2019;



[Konferenz: 10. BUIS-Tage, 24.-25. Mai 2018, Oldenburg]

## HERAUSGEBERSCHAFTEN

**Borgo, Stefano; Bozzato, Loris; Mossakowski, Till; Zimmermann, Antoine**

WOMoCoE - 4th International Workshop on Ontology Modularity, Contextuality, and Evolution  
CEUR workshop proceedings - Aachen: RWTH, Bd. 2518.2019

**Deb, Kalyanmoy; Goodman, Erik; Coello Coello, Carlos A.; Klamroth, Kathrin; Miettinen, Kaisa; Mostaghim, Sanaz; Reed, Patrick**

Evolutionary multi-criterion optimization - 10th international conference, EMO 2019, East Lansing, MI, USA, March 10-13, 2019 : proceedings

Cham: Springer International Publishing, 2019, Online-Ressource (XX, 757 Seiten) - (SpringerLink; Bücher; Lecture notes in computer science; 11411);

Kongress: EMO 10 (East Lansing, Mich. : 2019.03.10-13)

**Günes, Mesut; Engelhardt, Frank; Nothnagel, Katja**

18. GI/ITG KuVS Fachgespräch SensorNetze, FGSN 2019 - Programm : 19. September-20. September, Otto-von-Guericke-Universität Magdeburg

Magdeburg: Otto-von-Guericke-Universität Magdeburg: Fakultät für Informatik, 2019, 1 Online-Ressource (65 Seiten, 57,02 MB), Illustrationen, Diagramme;

Kongress: GI/ITG KuVS Fachgespräch SensorNetze 18 (Magdeburg : 2019.09.19-20)

## NICHT BEGUTACHTETE BUCHBEITRÄGE

**Engelhardt, Frank; Behrens, Johannes; Günes, Mesut**

Demo - A Haptic Communication testbed - integrating the control systems domain into communication testbeds  
18. GI/ITG KuVS Fachgespräch SensorNetze, FGSN 2019 - Programm : 19. September-20. September, Otto-von-Guericke-Universität Magdeburg - Magdeburg, S. 59-60;

[Tagung: FGSN 2019, 19. und 20. September 2019, Magdeburg]

**Engelhardt, Frank; Günes, Mesut**

Haptic Communication latency in Large-Scale Wireless mesh Networks

18. GI/ITG KuVS Fachgespräch SensorNetze, FGSN 2019 - Programm : 19. September-20. September, Otto-von-Guericke-Universität Magdeburg - Magdeburg, S. 33-36;

[Tagung: FGSN 2019, 19. und 20. September 2019, Magdeburg]

**Kientopf, Kai; Buschsieweke, Marian; Günes, Mesut**

Technical report - Designing a testbed for wireless communication research on embedded devices

18. GI/ITG KuVS Fachgespräch SensorNetze, FGSN 2019 - Programm : 19. September-20. September, Otto-von-Guericke-Universität Magdeburg - Magdeburg, S. 41-44;

[Tagung: FGSN 2019, 19. und 20. September 2019, Magdeburg]

**Krug, Andreas; Stober, Sebastian**

Siri visualisiert

Forschende betreiben Wissenschaftskommunikation - NaWik gGmbH, S. 24-25, 2019;

[Symposium: NaWik Symposium 2019, Karlsruhe, 5. April 2019]

**Rane, Roshan Prakash; Ofner, André; Gite, Shreyas; Stober, Sebastian**

Predictive coding based vision for autonomous cars

Computational Cognition 2019 - Osnabrück;

[Workshop: Computational Cognition 2019, ComCo-2019, Osnabrück, Germany, 01.-02.October 2019]

**Raza, Saleem; Nikoukar, Ali; Güne, Mesut**

A survey of selected evaluation tools and metrics for low-power and lossy networks - a simulation approach  
18. GI/ITG KuVS Fachgespräch SensorNetze, FGSN 2019 - Programm : 19. September-20. September,  
Otto-von-Guericke-Universität Magdeburg - Magdeburg, S. 53-56;  
[Tagung: FGSN 2019, 19. und 20. September 2019, Magdeburg]

**ABSTRACTS**

**Javadi, Mahrokh; Ramirez-Atencia, Cristian; Mostaghim, Sanaz**

Combining manhattan and crowding distances in decision space for multimodal multi-objective optimization problems

EUROGEN 2019 - Guimarães, S. 1-6;  
[Konferenz: EUROGEN 2019, Guimarães, Portugal, September 12-14, 2019]

**Javadi, Mahrokh; Zille, Heiner; Mostaghim, Sanaz**

The effects of crowding distance and mutation in multimodal and multi-objective optimization problems

EUROGEN 2019 - Guimarães, S. 1-8;  
[Konferenz: EUROGEN 2019, Guimarães, Portugal, September 12-14, 2019]

**Ofner, André; Stober, Sebastian**

Knowledge transfer in coupled predictive coding networks

Bernstein Conference - [Freiburg]; Sprekeler, Henning, S. 81, 2019;  
[Konferenz: Bernstein Conference 2019, Berlin, September 17-20, 2019]

**DISSERTATIONEN**

**Nguyen, Tuan Tran; Kruse, Rudolf [AkademischeR BetreuerIn]; Zug, Sebastian [AkademischeR BetreuerIn]**

A reliability-aware fusion concept toward robust ego-lane estimation incorporating multiple sources  
Wiesbaden: Springer, 2020, XIX, 164 Seiten, Illustrationen, 21 cm - (AutoUni Schriftenreihe; Band 140);  
[Literaturverzeichnis: Seite 121-136]

**Zille, Heiner; Mostaghim, Sanaz [AkademischeR BetreuerIn]**

Large-scale multi-objective optimisation - new approaches and a classification of the state-of-the-art  
Magdeburg, 2019, 241 Seiten, Illustrationen;  
[Literaturverzeichnis: Seite 179-188]

# INSTITUT FÜR SIMULATION UND GRAPHIK

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## 1. LEITUNG

Prof. Dr. Graham Horton (geschäftsführender Leiter)  
Prof. Dr. Holger Theisel  
Prof. Dr. Stefan Schirra  
Rita Freudenberg  
Dr. Volkmar Hinz  
Dr. Christian Rössl

## 2. VERÖFFENTLICHUNGEN

### BEGUTACHTETE ZEITSCHRIFTENAUFsätze

**Alemzadeh, Shiva; Niemann, Uli; Ittermann, T.; Völzke, H.; Schneider, D.; Spiliopoulou, Myra; Bühler, K.; Preim, Bernhard**

Visual analysis of missing values in longitudinal cohort study data  
Computer graphics forum - Oxford: Wiley-Blackwell, 2019;  
[Online first]  
[Imp.fact.: 2.046]

**Berg, Philipp; Saalfeld, Sylvia; Voß, Samuel; Beuing, Oliver; Janiga, Gábor**

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# INSTITUT FÜR TECHNISCHE UND BETRIEBLICHE INFORMATIONSSYSTEME

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## 1. LEITUNG

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Dipl.-Ing. Fred Kreuzmann

## 2. VERÖFFENTLICHUNGEN

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## 1. LEITUNG

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