

Publikationen

[BPS+24]

[PDFBIB](#)

Buglowski, M., Pfannschmidt, V., Stollenwerk, A., Schoberer, M., Huong Nguyen, T. B., Becker, S., and Braun, O., "Beatmungsgerät und Verfahren zur Atemgasversorgung", 2024.

Beatmungsgerät und Verfahren zur Atemgasversorgung

Bibtex entry :

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@techreport { BPS+24,
  author = { Buglowski, Mateusz and Pfannschmidt, Valerie and
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  title = { Beatmungsger{\a}t und Verfahren zur Atemgasversorgung },
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[GRB+24]

[PDFBIB](#)

Goldermann, L., Rakel, S., Buglowski, M., Mokhtarian, A., Kampmann, A., Janß, A., Yilmaz, O., Beger, F., Walter, M., Leonhardt, S., Kowalewski, S., and Stollenwerk, A., "Designing the user interface of a ventilator under the constraints of a pandemic", *Automatisierungstechnik*, vol. 72, iss. 5, pp. 484-495, 2024

Designing the user interface of a ventilator under the constraints of a pandemic

Bibtex entry :

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@article { GRB+24,
  author = { Goldermann, Lavinia and Rakel, Stefan and Buglowski,
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typ = { PUB:(DE-HGF)16 },
reportid = { RWTH-2024-04857 },
cin = { 122810 / 611010 / 419410 / 120000 },
}

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[MHA24]

[PDFBIB](#)

Mokhtarian, A., Hegerath, L., and Alrifaae, B., "CPM Academy: A Remote Platform for Teaching Current Topics in Connected and Automated Vehicles", in *Proc. 2023 62nd IEEE Conference on Decision and Control (CDC) : 13-15 Dec. 2023, 2024*, IEEE.

CPM Academy: A Remote Platform for Teaching Current Topics in Connected and Automated Vehicles

Bibtex entry :

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@inproceedings { MHA24,
  author = { Mokhtarian, Armin and Hegerath, Lucas and Alrifaae,
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  booktitle = { 2023 62nd IEEE Conference on Decision and Control
(CDC) :
13-15 Dec. 2023 },
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http://publications.rwth-aachen.de/record/977464/files/977464.pdf },
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[PSK24]

[PDFBIB](#)

Pfannschmidt, V., Stollenwerk, A., and Kowalewski, S., "Physiologische Regelung der künstlichen Beatmung Frühgeborener", in *Proc. Downloads zum 58. Regelungstechnischen Kolloquium vom 21. bis 23. Februar 2024: Kurzfassungen der Vorträge*, 2024.

Physiologische Regelung der künstlichen Beatmung Frühgeborener

Bibtex entry :

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@inproceedings { PSK24,
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[BBZ+23]

[PDFBIB](#)

Behery, M. A. A., Brauner, P., Zhou, H. A., Uysal, M. S., Samsonov, V., Bellgardt, M., Brillowski, F. S., Brockhoff, T., Farhang Ghahfarokhi, A., Gleim, L. C., Gorißen, L. M., Grochowski, M., Henn, T., Iacomini, E., Kaster, T., Koren, I., Liebenberg, M. R., Reinsch, L. N., Tirpitz, L., Trinh, M., Posada Moreno, A. F., Liehner, G. L. V., Schemmer, T., Vervier, L. S., Völker, M., Walderich, P., Zhang, S., Brecher, C., Schmitt, R. H., Decker, S. J., Gries, T., Häfner, C. L., Herty, M., Jarke, M., Kowalewski, S., Kuhlen, T., Schleifenbaum, J. H., Trimpe, J. S., van der Aalst, W. M. P., Ziefle, M., and Lakemeyer, G., "Actionable Artificial Intelligence for the Future of Production" Cham: Springer International Publishing, 2023, pp. 1-46.

Actionable Artificial Intelligence for the Future of Production

Bibtex entry :

```
@inbook { BBZ+23,
  author = { Behery, Mohamed Anwar Abdellatif and Brauner, Philipp
    and
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Sascha and Brockhoff, Tobias and Farhang Ghahfarokhi,
Anahita and Gleim, Lars Christoph and Gori{\ss}en, Leon
Michel and Grochowski, Marco and Henn, Thomas and Iacomini,
Elisa and Kaster, Thomas and Koren, István and Liebenberg,
Martin Roland and Reinsch, Leon Niwes and Tirpitz, Liam and
Trinh, Minh and Posada Moreno, Andres Felipe and Liehner,
Gian Luca Valentin and Schemmer, Thomas and Vervier, Luisa
Sophie and V{"o}lker, Marcus and Walderich, Philipp and
Zhang, Song and Brecher, Christian and Schmitt, Robert H.
and Decker, Stefan Josef and Gries, Thomas and H{"a}fner,
Constantin Leon and Herty, Michael and Jarke, Matthias and
Kowalewski, Stefan and Kuhlen, Torsten and Schleifenbaum,
Johannes Henrich and Trimpe, Johann Sebastian and van der
Aalst, Wil M. P. and Ziefle, Martina and Lakemeyer, Gerhard },
title = { Actionable Artificial Intelligence for the Future of
Production },
booktitle = { Internet of production : fundamentals, applications
and
proceedings / editors: Christian Brecher, G{"u"}nther Schuh,
Wil van der Aalst, Matthias Jarke, Frank T. Piller, Melanie
Padberg },
publisher = { Springer International Publishing },
pages = { 1-46 },
series = { Interdisciplinary Excellence Accelerator Series : IDEAS
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[BMA+23]

PDFBIB

Böhlen, B., Meyer, O., Alrifae, B., Beerwerth, J., Kampmann, A., Kowalewski, S., Konersmann, M., Rumpe, B., and Steinfurth, F., "Software-Defined Vehicle – Herausforderungen in der Diagnose dienstorientierter Fahrzeugarchitekturen", in *Proc. Diagnose in mechatronischen Fahrzeugsystemen XVI : Software-Defined Vehicle, SOVD, Maschinelles Lernen und KI, Standardisierung, HU und ADAS / Prof. Dr. Bernard Bäker, Dipl.-Ing. Andreas Unger (Hrsg.) und 53 Mitautoren*, Dresden, 2023, TUDpress, pp. 17-28.

Software-Defined Vehicle - Herausforderungen in der Diagnose dienstorientierter Fahrzeugarchitekturen

Bibtex entry :

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@inproceedings { BMA+23,
  author = { B{"o}hlen, Boris and Meyer, Oliver and Alrifaae, Bassam and
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  title = { Software-Defined Vehicle – Herausforderungen in der
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    Standardisierung, HU und ADAS / Prof. Dr. Bernard B{"a}ker,
    Dipl.-Ing. Andreas Unger (Hrsg.) und 53 Mitautoren },
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}
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[BWH+23]

PDFBIB

Berg, F. J., Wiartalla, M. O., Hüllmann, M., Derks, A., Kowalewski, S., and Stollenwerk, A., "ASMO: a decentralized and verifiable interoperability platform in intensive care", *Proceedings on automation in medical engineering*, vol. 2, iss. 1, p. 2, 2023

ASMO: a decentralized and verifiable interoperability platform in intensive care

Bibtex entry :

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@article { BWH+23,
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doi = { 10.18154/RWTH-2023-03716 },
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cin = { 122810 / 120000 },
url = { https://doi.org/10.18416/AUTOMED.2023 },
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[FFN+23]

[PDFBIB](#)

Fonck, S. A. M., Fritsch, S., Nottenkämper, G., and Stollenwerk, A., "Implementation of ResNet-50 for the Detection of ARDS in Chest X-Rays using transfer-learning", *Proceedings on automation in medical engineering*, vol. 2, iss. 1, p. 2, 2023

Implementation of ResNet-50 for the Detection of ARDS in Chest X-Rays using transfer-learning

Bibtex entry :

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@article { FFN+23,
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[FLS+23]

[PDFBIB](#)

Fischbach, A., Lamberti, M., Simons, J. A., Wrede, E., Theißen, A., Winnersbach, P., Rossaint, R., Stollenwerk, A., and Bleilevens, C., "Early Blood Clot Detection Using Forward Scattering Light Measurements Is Not Superior to Delta Pressure Measurements", *Biosensors : open access journal*, vol. 13, iss. 12, p. [1]-13, 2023

Early Blood Clot Detection Using Forward Scattering Light Measurements Is Not Superior to Delta Pressure Measurements

Bibtex entry :

```

@article { FLS+23,
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    (447729163) },
}

```

[KA23]

[PDFBIB](#)

Kloock, M. M. and Alrifae, B., "Coordinated Cooperative Distributed Decision-Making Using Synchronization of Local Plans", *IEEE Transactions on Intelligent Vehicles*, vol. 8, iss. 2, pp. 1292-1306, 2023

Coordinated Cooperative Distributed Decision-Making Using Synchronization of Local Plans

Bibtex entry :

```
@article { KA23,
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[KA23a]

[PDFBIB](#)

Kloock, M. M. and Alrifaae, B., "Cooperative Pose Control of Non-Holonomic Vehicles Using Synchronization", in *Proc. 2023 IEEE 26th International Conference on Intelligent Transportation Systems (ITSC) : [Proceedings]*, 2023, IEEE, pp. 93-99.

Cooperative Pose Control of Non-Holonomic Vehicles Using Synchronization

Bibtex entry :

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@inproceedings { KA23a,
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[Kam23]

[PDFBIB](#)

Kampmann, A., "A dynamic service-oriented software architecture for the automotive domain", PhD Thesis, Aachen, 2023.

A dynamic service-oriented software architecture for the automotive domain

Bibtex entry :

```

@phdthesis { Kam23,
  author = { Kampmann, Alexandru },
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[Klo23]

[PDFBIB](#)

Kloock, M. M., "Synchronization-based cooperative trajectory planning of networked vehicles", PhD Thesis, Aachen, 2023.

Synchronization-based cooperative trajectory planning of networked vehicles

Bibtex entry :

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@phdthesis { Klo23,
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[KSA23]

[PDF](#)[BIB](#)

Kloock, M. M., Scheffe, P., and Alrifaae, B., "Testing distributed trajectory planning in the cyber-physical mobility lab", *Automatisierungstechnik*, vol. 71, iss. 4, pp. 317-325, 2023

Testing distributed trajectory planning in the cyber-physical mobility lab

Bibtex entry :

```
@article { KSA23,
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http://publications.rwth-aachen.de/record/955879/files/955879.pdf },  
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[KSG+23]

[PDFBIB](#)

Kloock, M. M., Scheffe, P., Gress, O., and Alrifaaee, B., "An Architecture for Experiments in Connected and Automated Vehicles", *IEEE open journal of intelligent transportation systems*, vol. 4, pp. 175-186, 2023

An Architecture for Experiments in Connected and Automated Vehicles

Bibtex entry :

```
@article { KSG+23,  
  author = { Kloock, Maximilian Martin and Scheffe, Patrick and  
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[Kug23]

[PDFBIB](#)

Kugler, C., "Systematic derivation of feature-driven and risk-based test strategies for automotive applications", PhD Thesis, Aachen, 2023.

Systematic derivation of feature-driven and risk-based test strategies for automotive applications

Bibtex entry :

```
@phdthesis { Kug23,  
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  othercontributors = { Kowalewski, Stefan and Pischinger, Stefan },
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http://publications.rwth-aachen.de/record/959607/files/959607.pdf },
}

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[MKJ+23]

[PDF](#)BIB

Mohan Prabhu, V., Kessler, V., Jentges, M., and Kowalewski, S., "SafMiddleware: A configurable middleware for future safety-critical vehicle applications", in *Proc. Tagungsband : Embedded Software Engineering Kongress 2023, 4. bis 8. Dezember ; Preconference 1. Dezember 2023*, Würzburg, 2023, Vogel Communications Group, pp. 399-412.

SafMiddleware: A configurable middleware for future safety-critical vehicle applications

Bibtex entry :

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@inproceedings { MKJ+23,
    author = { Mohan Prabhu, Vinod and Kessler, V. and Jentges, Marco
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}

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[MKK+23]

PDFBIB

Mohan Prabhu, V., Kowalewski, S., Kessler, G., and Jentges, M., "Automotive Safety Software Architecture: A Fault-Tolerant Safety-Critical Software Architecture for Modern Vehicles", in *Proc. [32nd Aachen Colloquium Sustainable Mobility 2023]*, 2023.

Automotive Safety Software Architecture: A Fault-Tolerant Safety-Critical Software Architecture for Modern Vehicles

Bibtex entry :

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@inproceedings { MKK+23,
  author = { Mohan Prabhu, Vinod and Kowalewski, Stefan and Kessler, G.
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[MSV+23]

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Mroß, R., Schnakenbeck, A., Völker, M., Fay, A., and Kowalewski, S., "GRAFCET Reduction Techniques for Model Checking", in *Proc. 2023 IEEE 21st International Conference on Industrial Informatics (INDIN) : 18-20 July 2023 / publisher: IEEE, [Piscataway, NJ], 2023, IEEE, p. 6.*

GRAFCET Reduction Techniques for Model Checking

Bibtex entry :

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[MSV+23a]

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@inproceedings { MSV+23a,
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[PSA+23]

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@article { PSA+23,
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[SA23]

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Data-Driven Predictive Control With Online Adaption: Application to a Fuel Cell System

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@article { SBB+23,
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@article { SHK+23,
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  url = { http://publications.rwth-aachen.de/record/855596 },
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[Sim23]

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Bibtex entry :

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@phdthesis { Sim23,
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[SMV+23]

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[SMV+23a]

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[SMV+23b]

[PDFBIB](#)

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Structural Analysis of GRAFCET Control Specifications

Bibtex entry :

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@inproceedings { SMV+23b,
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```

[SOS23]

[PDFBIB](#)

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Bibtex entry :

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@article { SOS23,
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[SSK+23]

[PDFBIB](#)

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Investigating a Pressure Sensitive Surface Layer for

Vehicle Localization

Bibtex entry :

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@inproceedings { SSK+23,
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[TDB+23]

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    Abdellatif and Baier, Ralph Oliver and Henn, Thomas and
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[vLL+23]

[PDFBIB](#)

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  author = { van Kempen, Raphael and Lampe, Bastian and Leuffen, Marc
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Architektur und Technologien zur Orchestrierung
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[Vol23]

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Völker, M., "Policy iteration for value set analysis of PLC programs", PhD Thesis, Aachen, 2023.

Policy iteration for value set analysis of PLC programs

Bibtex entry :

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@phdthesis { Vol23,
author = { V{"o"}lker, Marcus },
othercontributors = { Kowalewski, Stefan and Beckert, Bernhard },
title = { Policy iteration for value set analysis of PLC programs
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[WBK+23]

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Wartalla, M. O., Berg, F. J., Kühn, J., Buglowski, M., Bleilevens, C., Kowalewski, S., and Stollenwerk, A., "A fully automated normothermic machine perfusion system for kidney grafts supporting physiological motivated flow profiles", *Current directions in biomedical engineering*, vol. 9, iss. 1, pp. 323-326, 2023

A fully automated normothermic machine perfusion system for kidney grafts supporting physiological motivated flow profiles

Bibtex entry :

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@article { WBK+23,
  author = { Wiartalla, Marc Oliver and Berg, Frederik Julius and
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[WBO+23a]

[PDFBIB](#)

Wiartalla, M. O., Berg, F. J., Ottersbach, F., Kühn, J., Buglowski, M., Kowalewski, S., and Stollenwerk, A., "A modular and verifiable software architecture for interconnected medical systems in intensive care", *Annals of computer science and information systems*, vol. 37, pp. 345-351, 2023

A modular and verifiable software architecture for

interconnected medical systems in intensive care

Bibtex entry :

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@article { WB0+23a,
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[BIK+22]

[PDF](#)BIB

Bolke-Hermanns, H., Indermark, K., Katoen, J., Kowalewski, S., Noll, T., and Thomas, W., "50 Jahre Studiengang Informatik an der RWTH Aachen : Ein Streifzug in Text und Bild", , Aachen2022.

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Bibtex entry :

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@techreport { BIK+22,
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aaabqpuxyx },
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[BOB+22]

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Becker, S., Ophelders, D., Buglowski, M., Orlikowsky, T., Schoberer, M., and Hütten, M., "Prospektive Beurteilung beatmungsassoziierter Komplikationen im translationalen ModellSabi", in *Proc. Abstracts 48. Jahrestagung der Gesellschaft für Neonatologie und Pädiatrische Intensivmedizin / Gesellschaft für Neonatologie und Pädiatrische Intensivmedizin e. V.*, 2022, p. 251.

Prospektive Beurteilung beatmungsassoziierter Komplikationen im translationalen ModellSabi

Bibtex entry :

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@inproceedings { BOB+22,
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[BOP+22]

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Bibtex entry :

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@inproceedings { BOP+22,
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mit adaptiver Anwenderunterstützung (NANNI) -
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[BPB+22]

[PDFBIB](#)

Buglowski, M., Pfannschmidt, V., Becker, S., Braun, O., Hutten, M., Ophelders, D., Oprea, C., Pattai, S., Schoberer, M., and Stollenwerk, A., "Closed-Loop Control of Arterial CO₂ in Mechanical Ventilation of Neonates", in *Proc. 44th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC) / pre-conference workshops & social events: Monday, July 11, 2022, conference dates: Tuesday, July 12-Friday, July 15, 2022 / conference chair: Christopher James (University of Warwick), conference co-chair: James Patton (University of Chicago) ; programm chair: Ron Summers (Collegium Basilea)*, [Piscataway, NJ], 2022, IEEE, pp. 4991-4995.

Closed-Loop Control of Arterial CO₂ in Mechanical Ventilation of Neonates

Bibtex entry :

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@inproceedings { BPB+22,
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Neonatologiebeatmungsger{\a}t
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[EEC+22]

[PDFBIB](#)

Edgworth, E., Ernst, L., Czigany, Z., Saritas, T., Zarnitz, L. S., Wiartalla, M. O., Boor, P., Buhl, E. M., Rossaint, R., Tolba, R. H., Doorschodt, B. M., Fabry, G., and Bleilevens, C., "HBOC-301 in Porcine Kidney Normothermic Machine Perfusion and the Effect of Vitamin C on Methemoglobin Formation", *Antioxidants : open access journal*, vol. 11, iss. 7, p. [1]-14, 2022

HBOC-301 in Porcine Kidney Normothermic Machine Perfusion and the Effect of Vitamin C on Methemoglobin Formation

Bibtex entry :

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@article { EEC+22,
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[GVK22]

[PDFBIB](#)

Grochowski, M., Völker, M., and Kowalewski, S., "Test Suite Augmentation for Reconfigurable PLC Software in the Internet of Production", in *Proc. Formal Methods for Industrial Critical Systems : 27th International Conference, FMICS 2022, Warsaw, Poland, September 14-15, 2022, Proceedings / edited by Jan Friso Groote, Marieke Huisman*, Cham, 2022 in Lecture notes in computer science, Springer, pp. 137-154.

Test Suite Augmentation for Reconfigurable PLC Software in the Internet of Production

Bibtex entry :

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@inproceedings { GVK22,
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[GVK22a]

[PDFBIB](#)

Grochowski, M., Völker, M., and Kowalewski, S., "Automatic Test Suite Generation for PLC Software in the Internet of Production", in *Proc. 2022 27th IEEE International Conference on Emerging Technologies and Factory Automation (ETFA) : 6-9 Sept. 2022 / [IEEE Industrial Electronics Society, IEEE]*, Piscataway, NJ, 2022, IEEE, p. 8.

Automatic Test Suite Generation for PLC Software in the Internet of Production

Bibtex entry :

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@inproceedings { GVK22a,
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[HVK+22]

[PDFBIB](#)

Henn, T., Völker, M., Kowalewski, S., Trinh, M., Petrovic, O., and Brecher, C., "Verification of Behavior Trees using Linear Constrained Horn Clauses", in *Proc. Formal Methods for Industrial Critical Systems (fmics 2022)*, 2022, pp. 211-225.

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Bibtex entry :

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@inproceedings { HVK+22,
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Clauses },
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[JSS+22]

PDFBIB

Janisch, T., Stollenwerk, A., Siekmann, U., and Kopp, R., "Treatment of children with Hyperbaric Oxygenation (HBOT) : an Europe-wide survey", *Minerva pediatrics*, vol. 74, iss. 2, pp. 116-120, 2022

Treatment of children with Hyperbaric Oxygenation (HBOT) : an Europe-wide survey

Bibtex entry :

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@article { JSS+22,
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[KDK+22]

PDFBIB

Kloock, M. M., Dirksen, M., Kowalewski, S., and Alrifaa, B., "Generation of Coupling Topologies for Multi-Agent Systems using Non-Cooperative Games", in *Proc. 2022 IEEE Intelligent Vehicles Symposium (IV) : 4-9 June 2022 / publisher: IEEE, Piscataway, NJ, 2022, IEEE, pp. 1-8.*

Generation of Coupling Topologies for Multi-Agent Systems using Non-Cooperative Games

Bibtex entry :

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[KLK+22]

[PDFBIB](#)

Kampmann, A., Lüer, M., Kowalewski, S., and Alrifaae, B., "Optimization-based Resource Allocation for an Automotive Service-oriented Software Architecture", in *Proc. 2022 IEEE Intelligent Vehicles Symposium (IV) : 4-9 June 2022 / publisher: IEEE*, Piscataway, NJ, 2022, IEEE, pp. 678-687.

Optimization-based Resource Allocation for an Automotive Service-oriented Software Architecture

Bibtex entry :

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@inproceedings { KLK+22,
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[KLP+22]

[PDFBIB](#)

Kampmann, A., Lamberti, M., Petrovic, N., Kowalewski, S., and Alrifaaee, B., "Investigating Outdoor Recognition Performance of Infrared Beacons for Infrastructure-based Localization", in *Proc. 2022 IEEE Intelligent Vehicles Symposium (IV) : 4-9 June 2022* / publisher: IEEE, Piscataway, NJ, 2022, IEEE, pp. 1107-1113.

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Bibtex entry :

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@inproceedings { KLP+22,
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[KMK+22]

[PDFBIB](#)

Kampmann, A., Mokhtarian, A., Kowalewski, S., and Alrifaaee, B., "ASOA - A Dynamic Software Architecture for Software-defined Vehicles", in *Proc. [31st Aachen Colloquium Sustainable Mobility 2022]*, 2022.

ASOA - A Dynamic Software Architecture for Software-

defined Vehicles

Bibtex entry :

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@inproceedings { KMK+22,
  author = { Kampmann, Alexandru and Mokhtarian, Armin and
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[MA22]

[PDFBIB](#)

Mokhtarian, A. and Alrifaae, B., "CPM Remote: A Remote Access to the CPM Lab", in *Proc. 8th-2022 International Conference on Control, Decision and Information Technologies (CoDIT'22) : May 17-20, 2022, Istanbul, Turkey / CoDIT 2022 ; IFAC - International Federation of Automation Control, IEEE, İzmir Ekonomi Üniversitesi, LISIER, IEEE SMC - System, Man, and Cybernetics Society, IEEE Control Systems Society, CNRS GDR - Groupement de recherche, RO - Recherche opérationnelle ; honorary chairs: Okyay Kaynak (Bogazici University, Turkey), Mengchu Zhou (New Jersey Institute of Technology, USA) ; publication co-chairs: Mariagrazia Dotoli (Polytechnic University of Bari, Italy), Nicholas Karampetakis (Aristotle University of Thessaloniki, Greece), Kamal Medjaher (École nationale d'ingénieurs de Tarbes, France), [Piscataway, NJ], 2022, IEEE, pp. 1124-1129.*

CPM Remote: A Remote Access to the CPM Lab

Bibtex entry :

```
@inproceedings { MA22,
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      Federation of Automation Control, IEEE, İzmir Ekonomi
      {"U"}niversitesi, LISIER, IEEE SMC - System, Man, and
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      - Groupement de recherche, RO - Recherche opérationnelle ;
      honorary chairs: Okyay Kaynak (Bogazici University, Turkey),
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Mengchu Zhou (New Jersey Institute of Technology, USA) ;
publication co-chairs: Mariagrazia Dotoli (Polytechnic
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```

[MSA22]

[PDFBIB](#)

Mokhtarian, A., Schäfer, S., and Alrifaaee, B., "CPM Olympics: Development of Scenarios for Benchmarking in Networked and Autonomous Driving", in *Proc. 2022 IEEE Intelligent Vehicles Symposium (IV) : 4-9 June 2022* / publisher: IEEE, Piscataway, NJ, 2022, IEEE, pp. 9-15.

CPM Olympics: Development of Scenarios for Benchmarking in Networked and Autonomous Driving

Bibtex entry :

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@inproceedings { MSA22,
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in
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[MSK+22]

PDFBIB

Mokhtarian, A., Scheffe, P., Kowalewski, S., and Alrifaae, B., "Remote Teaching with the Cyber-Physical Mobility Lab", *IFAC-PapersOnLine*, vol. 55, iss. 17, pp. 386-391, 2022

Remote Teaching with the Cyber-Physical Mobility Lab

Bibtex entry :

```
@article { MSK+22,
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http://publications.rwth-aachen.de/record/855749/files/855749.pdf },
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[MSV+22]

PDFBIB

Mroß, R., Schnakenbeck, A., Völker, M., Fay, A., and Kowalewski, S., "Transformation of GRAFCET Into GAL for Verification Purposes Based on a Detailed Meta-Model", *IEEE access*, vol. 10, pp. 125652-125665, 2022

Transformation of GRAFCET Into GAL for Verification Purposes Based on a Detailed Meta-Model

Bibtex entry :

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@article { MSV+22,
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author = { Mro{\ss}, Robin and Schnakenbeck, Aron and V{"o}lker,
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pages = { 125652-125665 },
volume = { 10 },
year = { 2022 },
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http://publications.rwth-aachen.de/record/862557/files/862557.pdf },
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[OBS+22]

PDFBIB

Olivier, L., Buglowski, M., Sabine, B., Hütten, M., Olikowsky, T., Stollenwerk, A., and Schoberer, M., "Work in progress: Detektion einer intensivierten invasiven Beatmung bei Neonaten mithilfe eines Fuzzylogik-Modells", in *Proc. Abstracts 48. Jahrestagung der Gesellschaft für Neonatologie und Pädiatrische Intensivmedizin / Gesellschaft für Neonatologie und Pädiatrische Intensivmedizin e. V.*, Jena, 2022, Conventus Congressmanagement & Marketing GmbH, p. 93.

Work in progress: Detektion einer intensivierten invasiven Beatmung bei Neonaten mithilfe eines Fuzzylogik-Modells

Bibtex entry :

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@inproceedings { OBS+22,
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    mit adaptiver Anwenderunterst{"u}tzung (NANNI) -
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[SDA22]

[PDFBIB](#)

Scheffe, P., Dorndorf, G., and Alrifaae, B., "Increasing Feasibility with Dynamic Priority Assignment in Distributed Trajectory Planning for Road Vehicles", in *Proc. 2022 IEEE 25th International Conference on Intelligent Transportation Systems (ITSC) : 8-12 Oct. 2022*, Piscataway, NJ, 2022, IEEE, pp. 3873-3879.

Increasing Feasibility with Dynamic Priority Assignment in Distributed Trajectory Planning for Road Vehicles

Bibtex entry :

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@inproceedings { SDA22,
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in
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[SMV+22]

PDFBIB

Schnakenbeck, A., Mroß, R., Völker, M., Kowalewski, S., and Fay, A., "Transformation von GRAFCET in GAL auf Basis eines ausführlichen Metamodells zur Verifikation von Entwurfsfehlern", in *Proc. Entwurf komplexer Automatisierungssysteme : Beschreibungsmittel, Methoden, Werkzeuge und Anwendungen / Ulrich Jumar, Christian Diedrich (Hrsg.)*, Magdeburg, 2022, Otto-von-Guericke-Universität Magdeburg, p. 18.

Transformation von GRAFCET in GAL auf Basis eines ausführlichen Metamodells zur Verifikation von Entwurfsfehlern

Bibtex entry :

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@inproceedings { SMV+22,
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  cin = { 122810 / 120000 },
}
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[SPF+22]

PDFBIB

Scheffe, P., Pedrosa, M. V. A., Flaßkamp, K., and Alrifaae, B., "Receding Horizon Control Using Graph Search for Multi-Agent Trajectory Planning", *IEEE Transactions on Control Systems Technology*, vol. 31, iss. 3, pp. 1092-1105, 2022

Receding Horizon Control Using Graph Search for Multi-Agent Trajectory Planning

Bibtex entry :

```
@article { SPF+22,
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[WSE+22]

[PDFBIB](#)

Walter, M., Stollenwerk, A., Eckstein, L., Kowalewski, S., and Leonhardt, S., "PV1000 – Interdisziplinäre Entwicklung eines Pandemie-Beatmungsgerätes", in *Proc. MT-2022 Tagungsband*, 2022, p. 169.

PV1000 - Interdisziplinäre Entwicklung eines Pandemie-Beatmungsgerätes

Bibtex entry :

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@inproceedings { WSE+22,
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https://www.vdi-mechatroniktagung.de/images/programm/MT2022_Tagungsband
.pdf },
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[Boh21]

[PDFBIB](#)

Bohlender, D., "Symbolic methods for formal verification of industrial control software", PhD Thesis, Aachen, 2021.

Symbolic methods for formal verification of industrial control software

Bibtex entry :

```
@phdthesis { Boh21,
  author = { Bohlender, Dimitri },
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  title = { Symbolic methods for formal verification of industrial
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[FFK+21]

[PDFBIB](#)

Fonck, S., Fritsch, S. J., Kowalewski, S., Hensen, R., and Stollenwerk, A., "Algorithmic distinction of ARDS and Heart Failure in ICU data from medical embedded systems by using a computer model", *IFAC-PapersOnLine*, vol. 54, iss. 4, pp. 135-140, 2021

Algorithmic distinction of ARDS and Heart Failure in ICU data from medical embedded systems by using a computer model

Bibtex entry :

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@article { FFK+21,
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Computational
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[JSG+21]

[PDFBIB](#)

Jatzkowski, I., Stolte, T., Graubohm, R., Maurer, M., Kampmann, A., Alrifaaee, B., Kowalewski, S., Buchholz, M., and Dietmayer, K., "Integration of a Vehicle Operating Mode Management into UNICARagil's Automotive Service-oriented Software Architecture", in *Proc. 30. Aachen Colloquium Sustainable Mobility : October 4th-6th, 2021 / scientific management: Univ.-Prof. Dr.-Ing. Lutz Eckstein, Univ.-Prof. Dr.-Ing. Stefan Pischinger ; organizational management: Michaela Wacker (M. Sc.), Jonas Müller (M. Sc.) ; organized by: Institute for Automotive Engineering (RWTH Aachen University), Institute for Combustion Engines (RWTH Aachen University)*, Aachen, 2021, Institute for Automotive Engineering, RWTH Aachen University, pp. 595-614.

Integration of a Vehicle Operating Mode Management into UNICARagil's Automotive Service-oriented Software Architecture

Bibtex entry :

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@inproceedings { JSG+21,
author = { Jatzkowski, Inga and Stolte, Torben and Graubohm, Robert
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Maurer, Markus and Kampmann, Alexandru and Alrifaaee, Bassam
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title = { Integration of a Vehicle Operating Mode Management into
UNICARagil's Automotive Service-oriented Software
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booktitle = { 30. Aachen Colloquium Sustainable Mobility : October
4th-6th, 2021 / scientific management: Univ.-Prof. Dr.-Ing.
Lutz Eckstein, Univ.-Prof. Dr.-Ing. Stefan Pischinger ;
organizational management: Michaela Wacker (M. Sc.), Jonas
M{"u"}ller (M. Sc.) ; organized by: Institute for Automotive
Engineering (RWTH Aachen University), Institute for

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http://publications.rwth-aachen.de/record/840892/files/840892.pdf },
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```

[KHK+21]

[PDFBIB](#)

Kloock, M. M., He, Q., Kowalewski, S., and Alrifaaee, B., "Trajectory Verification for Networked and Autonomous Vehicles using Temporal Logic and Model Checking", in *Proc. 2021 IEEE International Intelligent Transportation Systems Conference (ITSC) : 19-22 Sept. 2021* / publisher: IEEE, [Piscataway, NJ], 2021, IEEE, pp. 244-250.

Trajectory Verification for Networked and Autonomous Vehicles using Temporal Logic and Model Checking

Bibtex entry :

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@inproceedings { KHK+21,
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Kowalewski,
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    publisher = { IEEE },
    pages = { 244-250 },
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Systems
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[KSM+21]

PDFBIB

Kloock, M. M., Scheffe, P., Maczijewski, J., Kampmann, A., Mokhtarian, A., Kowalewski, S., and Alrifaae, B., "Cyber-Physical Mobility Lab : An Open-Source Platform for Networked and Autonomous Vehicles", in *Proc. 2021 European Control Conference (ECC)*, [Piscataway, NJ], 2021, IEEE, pp. 1937-1944.

Cyber-Physical Mobility Lab : An Open-Source Platform for Networked and Autonomous Vehicles

Bibtex entry :

```
@inproceedings { KSM+21,
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2021-06-29 -
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[LKL+21]

PDFBIB

Lamberti, M., Kopp, R., Lübke, C., Leonhardt, S., Walter, M., and Stollenwerk, A., "Safety and Automation Concepts for Artificial Impantable Lungs - SmartLungControl", *Biomedical engineering*, vol. 66, iss. s1, 2021

Safety and Automation Concepts for Artificial Impantable Lungs - SmartLungControl

Bibtex entry :

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@article { LKL+21,
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Engineering,
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[MBF+21]

PDFBIB

Marx, G., Bickenbach, J., Fritsch, S. J., Kunze, J. B., Maassen, O., Deffge, S., Kistermann, J., Haferkamp, S. D., Lutz, I., Voellm, N. K., Lowitsch, V., Polzin, R., Sharafutdinov, K., Mayer, H., Kuepfer, L., Burghaus, R., Schmitt, W., Lippert, J., Riedel, M., Barakat, C., Stollenwerk, A., Fonck, S., Putensen, C., Zenker, S., Erdfelder, F., Grigutsch, D., Kram, R., Beyer, S., Kampe, K., Gewehr, J. E., Salman, F., Juers, P., Kluge, S., Tiller, D., Wisotzki, E., Gross, S., Homeister, L., Bloos, F., Scherag, A., Ammon, D., Mueller, S., Palm, J., Simon, P., Jahn, N., Loeffler, M., Wendt, T., Schuerholz, T., Groeber, P., and Schuppert, A., "Algorithmic surveillance of ICU patients with acute respiratory distress syndrome (ASIC) : protocol for a multicentre stepped-wedge cluster randomised quality improvement strategy", *BMJ open*, vol. 11, iss. 4, pp. 1-7, 2021

Algorithmic surveillance of ICU patients with acute respiratory distress syndrome (ASIC) : protocol for a multicentre stepped-wedge cluster randomised quality improvement strategy

Bibtex entry :

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@article { MBF+21,
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            Dorothee and Lutz, Irina and Voellm, Nora Kristiana and
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            Konstantin and Mayer, Hannah and Kuepfer, Lars and Burghaus,
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Simon and Putensen, Christian and Zenker, Sven and
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Tiller, Daniel and Wisotzki, Emilia and Gross, Sebastian and
Homeister, Lorenz and Bloos, Frank and Scherag, André and
Ammon, Danny and Mueller, Susanne and Palm, Julia and Simon,
Philipp and Jahn, Nora and Loeffler, Markus and Wendt,
Thomas and Schuerholz, Tobias and Groeber, Petra and
Schuppert, Andreas },
title = { Algorithmic surveillance of ICU patients with acute
respiratory distress syndrome (ASIC) : protocol for a
multicentre stepped-wedge cluster randomised quality
improvement strategy },
journal = { BMJ open },
publisher = { BMJ Publishing Group },
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[MKL+21]

[PDFBIB](#)

Mokhtarian, A., Kampmann, A., Lüer, M., Kowalewski, S., and Alrifaae, B., "A Cloud Architecture for Networked and Autonomous Vehicles", *IFAC-PapersOnLine*, vol. 54, iss. 2, pp. 233-239, 2021

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@article { MKL+21,
  author = { Mokhtarian, Armin and Kampmann, Alexandru and L{"u}er,
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Systems,
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doi = { 10.1016/j.ifacol.2021.06.028 },
typ = { PUB:(DE-HGF)16 },
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http://publications.rwth-aachen.de/record/828696/files/828696.pdf },
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[MKV+21]

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  author = { Mohan Prabhu, Vinod and Kowalewski, Stefan and
    Vadakkepattath, J. and Jentges, Marco },
  title = { A lean safety-critical software development process for
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}

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[PSS+21]

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Preuss, R., Smieschek, M., Stollenwerk, A., Kowalewski, S., and Heinrichs, T., "Behälterreinigungsmaschine", 2021.

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@techreport { PSS+21,
  author = { Preuss, R{"u"}diger and Smieschek, Manfred and

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Stollenwerk,
    André and Kowalewski, Stefan and Heinrichs, Timo },
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https://worldwide.espacenet.com/patent/search/family/066998405/publication/DE102018120081B4?q=DE102018120081 },
}

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[Sch21]

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Schweigler, M., "Ground surface pattern recognition for enhanced navigation", PhD Thesis, Aachen, 2021.

Ground surface pattern recognition for enhanced navigation

Bibtex entry :

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@phdthesis { Sch21,
    author = { Schweigler, Martin },
    othercontributors = { Kowalewski, Stefan and Abel, Dirk },
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http://publications.rwth-aachen.de/record/820793/files/820793.pdf },
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[Tho21]

[PDFBIB](#)

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systems using PLC languages

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[BBF+20]

[PDFBIB](#)

Buglowski, M., Bleilevens, C., Fabry, G., Kowalewski, S., and Stollenwerk, A., "Flussgesteuerte pH-Regulierung in einem automatisierten Nierenperfusionssystem", *Proceedings on automation in medical engineering*, vol. 1, iss. 1, 2020

Flussgesteuerte pH-Regulierung in einem automatisierten Nierenperfusionssystem

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@article { BBF+20,
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[BBG+20]

[PDFBIB](#)

Buchsbaum, M. S. K., Brecher, C., Grochowski, M., and Kowalewski, S., "Identifikation von Informationen zur Beschreibung der Systemgrenzen eines sicheren, cyber-physischen Automatisierungssystems", in *Proc. Entwurf komplexer Automatisierungssysteme : Beschreibungsmittel, Methoden, Werkzeuge und Anwendungen : 16. Fachtagung EKA 2020 / Ulrich Jumar, Christian Diedrich (Hrsg.)*, Magdeburg, 2020, Institut für Automation und Kommunikation e.V., An-Institut der Otto-von-Guericke-Universität Magdeburg, p. 10.

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@inproceedings { BBG+20,
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[BKR+20]

[PDFBIB](#)

Bürger, J. C., Kausch, H., Raco, D., Ringert, J. O., Rumpe, B., Stüber, S. W., and Wiartalla, M. O., "Towards an Isabelle Theory for distributed, interactive systems : the untimed case", , Düren2020.

Towards an Isabelle Theory for distributed, interactive systems : the untimed case

Bibtex entry :

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@techreport { BKR+20,
  author = { B{"u"}rger, Jens Christoph and Kausch, Hendrik and Raco,
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https://www.shaker.de/de/content/catalogue/index.asp?lang=de&ID=8&ISBN=978-3-8440-7265-5 },
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[DCC20]

[PDFBIB](#)

Dzafic, D., Candiotti, J. L., and Cooper, R. A., "Improving wheelchair route planning through instrumentation and navigation systems", in *Proc. 42nd Annual International Conferences of the IEEE Engineering in Medicine and Biology Society in conjunction with the 43rd Annual Conference of the Canadian Medical and Biological Engineering Society : July 20-24, 2020 via the EMBS Virtual Academy / IEEE, EMB ; conference chairs: Mohamad Sawan (Westlake University), Carolyn McGregor AM (Ontario Tech University), Atam Dhawan (NJIT), Piscataway, NJ, 2020, IEEE, pp. 5737-5740.*

Improving wheelchair route planning through instrumentation and navigation systems

Bibtex entry :

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@inproceedings { DCC20,
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EMBS Virtual Academy / IEEE, EMB ; conference chairs:
Mohamad Sawan (Westlake University), Carolyn McGregor AM
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  url = { http://publications.rwth-aachen.de/record/816058 },
}
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[FFL20]

[PDFBIB](#)

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Bibtex entry :

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proceedings : 23-27 March 2020, Porto, Portugal / publisher:
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doi = { 10.1109/ICSTW50294.2020.00042 },
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[GKB+20]

[PDFBIB](#)

Grochowski, M., Kowalewski, S., Buchsbaum, M. S. K., and Brecher, C., "Befähigung der Testautomatisierung für ein cyber-physisches Produktionssystem", in *Proc. Entwurf komplexer Automatisierungssysteme : Beschreibungsmittel, Methoden, Werkzeuge und Anwendungen : 16. Fachtagung EKA 2020 / Ulrich Jumar, Christian Diedrich (Hrsg.)*, Magdeburg, 2020, Institut für Automation und Kommunikation e.V. - An-Institut der Otto-von-Guericke-Universität Magdeburg, p. 10.

Befähigung der Testautomatisierung für ein cyber-physisches Produktionssystem

Bibtex entry :

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@inproceedings { GKB+20,
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[GSB+20]

[PDFBIB](#)

Grochowski, M., Simon, H., Bohlender, D., Kowalewski, S., Löcklin, A., Müller, T., Jazdi, N., Zeller, A., and Weyrich, M., "Formale Methoden für rekonfigurierbare cyber-physische Systeme in der Produktion", *Automatisierungstechnik*, vol. 68, iss. 1, pp. 3-14, 2020

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Bibtex entry :

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@article { GSB+20,
  author = { Grochowski, Marco and Simon, Hendrik and Bohlender,
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[KGE+20]

[PDFBIB](#)

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Bibtex entry :

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@article { KGE+20,
  author = { K{"o"}nig, Georg and Grochowski, Marco and Eckert,
Marvin

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        and Jakobczak, F. and Stollenwerk, Jochen and Kowalewski, S.
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[KMR+20]

[PDFBIB](#)

Kampmann, A., Mokhtarian, A., Rogalski, J., Kowalewski, S., and Alrifaaee, B., "Agile Latency Estimation for a Real-time Service-oriented Software Architecture", *IFAC-PapersOnLine*, vol. 53, iss. 2, pp. 5795-5800, 2020

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Bibtex entry :

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@article { KMR+20,
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Meeting
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[KST+20]

[PDFBIB](#)

Kloock, M. M., Scheffe, P., Tülleners, I., Maczijewski, J., Kowalewski, S., and Alrifaaee, B., "Vision-Based Real-Time Indoor Positioning System for Multiple Vehicles", *IFAC-PapersOnLine*, vol. 53, iss. 2, pp. 15446-15453, 2020

Vision-Based Real-Time Indoor Positioning System for Multiple Vehicles

Bibtex entry :

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@article { KST+20,
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http://publications.rwth-aachen.de/record/817298/files/817298.pdf },
}

```

[LvW+20]

[PDFBIB](#)

Lampe, B., van Kempen, R., Woopen, T., Kampmann, A., Alrifaaee, B., and Eckstein, L., "Reducing Uncertainty by Fusing Dynamic Occupancy Grid Maps in a Cloud-based Collective Environment Model", in *Proc. 2020 IEEE Intelligent Vehicles Symposium (IV)* / publisher: IEEE, Piscataway, NJ, 2020, IEEE, pp. 837-843.

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@inproceedings { LvW+20,
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}
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[LvW+20a]

[PDF](#)[BIB](#)

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Bibtex entry :

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@article { LvW+20a,
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[MKA+20]

PDFBIB

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  author = { Mokhtarian, Armin and Kampmann, Alexandru and Alrifae,
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@inproceedings { MKA+20a,
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[MKK+20]

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[Obs20]

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[SMK+20]

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  author = { Scheffe, Patrick and Maczijewski, Janis and Kloock,
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[SRT+20]

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https://www.vdi.de/richtlinien/details/vdivde-3711-eingabe-und-uebertragung-von-instandhaltungsinformationen-fuer-das-condition-monitoring-digitalisierung-von-offline-informationen },
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[Sto20]

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Leveraging Horn clause solving for compositional verification of PLC software

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https://www.semanticscholar.org/paper/Towards-a-Characterization-of-Explainable-Systems-Bohlender-Köhl/b3516a71fed895a1a88b7d9842eca41c0fb48b7d },
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[Der19]

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Verification of embedded software models by combining abstract interpretation, symbolic execution and stability analysis

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[PDFBIB](#)

Fabry, G., Doorschodt, B. M., Grzanna, T., Boor, P., Elliott, A. R., Stollenwerk, A., Tolba, R. H., Rossaint, R., and Bleilevens, C., "Cold Preflush of Porcine Kidney Grafts Prior to Normothermic Machine Perfusion Aggravates Ischemia Reperfusion Injury", *Scientific reports*, vol. 9, p. 9, 2019

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[GKB+19]

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Bibtex entry :

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[GKB+19a]

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@inproceedings { GKB+19a,
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[Gob19]

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[KAK+19]

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        Marcus and Eckstein, Lutz and Kowalewski, Stefan },
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Highly
        Automated Vehicles },
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        - ITSC : Auckland, New Zealand, 27-30 October 2019 / IEEE,
        IEEE-ITSC 2019, ITSS - IEEE Intelligent Transportation
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[KBL+19]

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      (BMBF-031L0134B) },
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  author = { Kloock, Maximilian Martin and Kragl, Ludwig and
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    Hans-Christian and Buchholz, Michael and Gies, Fabian and
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    author = { Kloock, Maximilian Martin and Scheffe, Patrick and
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  author = { Schommer, John },
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  pages = { 1 Online-Ressource (xv, 177 Seiten) : Illustrationen,
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pages = { 1388-1393 },
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Engineering, Vancouver, BC (Canada), 2019-08-22 - 2019-08-26 },
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    Vehicles,
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[BHK18]

[PDFBIB](#)

Bohlender, D., Hamm, D., and Kowalewski, S., "Cycle-Bounded Model Checking of PLC Software via Dynamic Large-Block Encoding", in *Proc. Applied computing 2018 : the 33rd Annual ACM Symposium on Applied Computing : Pau, France, April 9-13, 2018 / sponsored by: ACM Special Interest Group on Applied Computing ; conference chairs: Hisham M. Haddad (Kennesaw State University, USA), Roger L. Wainwright (University of Tulsa, USA), Richard Chbeir (University of Pau & Pays Adour, France)*, New York, NY, 2018, ACM, pp. 1891-1898.

Cycle-Bounded Model Checking of PLC Software via Dynamic Large-Block Encoding

Bibtex entry :

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@inproceedings { BHK18,
  author = { Bohlender, Dimitri and Hamm, Daniel and Kowalewski, Stefan },
  title = { Cycle-Bounded Model Checking of PLC Software via Dynamic Large-Block Encoding },
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url = { http://publications.rwth-aachen.de/record/752221 },
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[BK18]

[PDFBIB](#)

Bohlender, D. and Kowalewski, S., "Compositional Verification of PLC Software using Horn Clauses and Mode Abstraction", *IFAC-PapersOnLine*, vol. 51, iss. 7, pp. 428-433, 2018

Compositional Verification of PLC Software using Horn Clauses and Mode Abstraction

Bibtex entry :

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@article { BK18,
  author = { Bohlender, Dimitri and Kowalewski, Stefan },
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[BK18a]

[PDFBIB](#)

Bohlender, D. and Kowalewski, S., "Design and Verification of Restart-Robust Industrial Control Software", in *Proc. Integrated formal methods : 14th International Conference, IFM 2018, Maynooth, Ireland, September 5-7, 2018 : proceedings / Carlo A. Furia, Kirsten Winter (eds.)*, Cham, 2018 in *Lecture notes in computer science*, Springer, pp. 47-68.

Design and Verification of Restart-Robust Industrial Control Software

Bibtex entry :

```
@inproceedings { BK18a,
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    publisher = { Springer },
    pages = { 47-68 },
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    year = { 2018 },
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    organization = { 14. International Conference on Integrated Formal
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}

```

[CMW+18]

PDFBIB

Chomicz, P., Müller-Lerwe, A., Wegner, G., Busch, R., and Kowalewski, S., "Controlled Natural Languages for Hazard Analysis and Risk Assessment", in *Proc. Controlled Natural Language : Proceedings of the Sixth International Workshop, CNL 2018, Maynooth, Co. Kildare, Ireland, August 27-28, 2018 / edited by Brian Davis (Maynooth University, Ireland), C. Maria Keet (University of Cape Town, South Africa) and Adam Wyner (Swansea University, United Kingdom)*, Amsterdam [u.a.], 2018 in *Frontiers in Artificial Intelligence and Applications*, IOS Press, pp. 41-51.

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Bibtex entry :

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@inproceedings { CMW+18,
  author = { Chomicz, Paul and M{"u"}ller-Lerwe, Armin and Wegner,
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}

```

[GSA+18]

[PDFBIB](#)

Grochowski, M., Schweigler, M., Alrifaae, B., and Kowalewski, S., "A GPS-aided Inertial Navigation System for Vehicular Navigation using a Smartphone", *IFAC-PapersOnLine*, vol. 51, iss. 10, pp. 121-126, 2018

A GPS-aided Inertial Navigation System for Vehicular Navigation using a Smartphone

Bibtex entry :

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@article { GSA+18,
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[KRG+18]

[PDFBIB](#)

Kriebel, S., Richenhagen, J. M., Granrath, C., and Kugler, C., "Systems engineering with SysML : The path to the future?", *MTZ worldwide*, vol. 79, iss. 5, pp. 44-47, 2018

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Bibtex entry :

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@article { KRG+18,  
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[KRG+18a]

[PDFBIB](#)

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Systems Engineering mit SysML : Der Weg in die Zukunft?

Bibtex entry :

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@article { KRG+18a,  
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[KSK+18]

[PDFBIB](#)

Kühn, J., Stollenwerk, A., Kowalewski, S., Fabry, G., Grzanna, T., Doorschodt, B., Tolba, R. H., Rossaint, R., and Bleilevens, C., "A long-term setup for kidney perfusion". 2018.

A long-term setup for kidney perfusion

Bibtex entry :

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@inproceedings { KSK+18,
  author = { K{"u}hn, Jan and Stollenwerk, André and Kowalewski,
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      (BMBF-031L0134B) },
}

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[MVC+18]

[PDFBIB](#)

Merchant, F., Vatwani, T., Chattopadhyay, A., Raha, S., Nandy, S. K., and Narayan, R., "Efficient Realization of Householder Transform Through Algorithm-Architecture Co-Design for Acceleration of QR Factorization", *IEEE transactions on parallel and distributed systems*, vol. 29, iss. 8, pp. 1707-1720, 2018

Efficient Realization of Householder Transform Through Algorithm-Architecture Co-Design for Acceleration of QR

Factorization

Bibtex entry :

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@article { MVC+18,
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[PAS+18]

[PDFBIB](#)

Pomprapa, A., Ahmed, W., Stollenwerk, A., Kowalewski, S., Uguz, D. U., and Leonhardt, S., "Arrhythmia Analysis in a Non-contact cECG Chair using Convolutional Neural Network", in *Proc. Proceedings of the 11th International Conference on Bioelectromagnetism : 23-25 May 2018, Aachen, Germany / Organizing Committee for ICBEM 2018 in Aachen: Prof. Steffen Leonhardt, RWTH Aachen University, Germany, Prof. Jaakko Malmivuo, Technische Universität Berlin, Germany, Dr. Marian Walter, RWTH Aachen University, Germany, Benjamin Hentze, RWTH Aachen University, Germany Markus Lüken, RWTH Aachen University, Germany ; Scientific Committee for ICBEM 2018 in Aachen: Prof. Catherine Disselhorst-Klug, RWTH Aachen University, Germany [und 27 weitere], Aachen, 2018, p. 4.*

Arrhythmia Analysis in a Non-contact cECG Chair using Convolutional Neural Network

Bibtex entry :

```
@inproceedings { PAS+18,
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Malmivuo, Technische Universit{"a}t Berlin, Germany, Dr.
Marian Walter, RWTH Aachen University, Germany, Benjamin
Hentze, RWTH Aachen University, Germany Markus L{"u}ken,
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[PAS+18a]

[PDFBIB](#)

Pomprapa, A., Ahmed, W., Sayani, M. S., Stollenwerk, A., Kowalewski, S., and Leonhardt, S., "Classification of Obstructive Sleep Apnea Using Machine Learning", *American journal of respiratory and critical care medicine*, vol. 197, iss. Abstract Issue, p. 1, 2018

Classification of Obstructive Sleep Apnea Using Machine Learning

Bibtex entry :

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@article { PAS+18a,
author = { Pomprapa, Anake and Ahmed, W. and Sayani, M. S. and
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journal = { American journal of respiratory and critical care
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https://www.atsjournals.org/doi/abs/10.1164/ajrccm-conference.2018.197.1\_MeetingAbstracts.A7449 },
}

```

[PAS+18b]

[PDFBIB](#)

Pomprapa, A., Ahmed, W., Stollenwerk, A., Kowalewski, S., Uguz, D. U., and Leonhardt, S., "Arrhythmia Analysis in a Non-contact cECG Chair using Convolutional Neural Network", *International journal of bioelectromagnetism : IJBEM*, vol. 20, iss. 1, pp. 47-50, 2018

Arrhythmia Analysis in a Non-contact cECG Chair using Convolutional Neural Network

Bibtex entry :

```

@article { PAS+18b,
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[PSA+18]

[PDFBIB](#)

Pomprapa, A., Sayani, M. S., Anwar, T., Stollenwerk, A., Kowalewski, S., von Platen, P. H., and

Leonhardt, S., "Apnea Detection in a Contactless Multisensor System using Deep Learning Algorithm", in *Proc. [13th Russian-German Conference on Biomedical Engineering (RGC), RGC, 2018-05-23 - 2018-05-25, Aachen, Germany]*, 2018.

Apnea Detection in a Contactless Multisensor System using Deep Learning Algorithm

Bibtex entry :

```
@inproceedings { PSA+18,
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[SBK18]

[PDFBIB](#)

Stollenwerk, A., Buglowski, M., and Kühn, J., "Mock loop for bubble generation in a centrifugal blood pump for fault simulation", *Current Directions in Biomedical Engineering*, vol. 4, iss. 1, pp. 33-36, 2018

Mock loop for bubble generation in a centrifugal blood pump for fault simulation

Bibtex entry :

```
@article { SBK18,
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http://publications.rwth-aachen.de/record/752262/files/752262.pdf },
}

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[SGT+18]

[PDFBIB](#)

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Bibtex entry :

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@inproceedings { SGT+18,
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[SHS+18]

[PDFBIB](#)

Smieschek, M., Hinrichs, T., Stollenwerk, A., Kowalewski, S., and Preuß, R., "A New Condition Indicator for Slow-Rotating Roller Chains based on the Angle and Torque of the Driving Motor", in *Proc. 2018 IEEE 14th International Conference on Automation Science and Engineering (CASE) : 20-24 Aug. 2018 / general chair: Birgit Vogel-Heuser (Technical University of Munich) ; publisher: IEEE, Piscataway, NJ, 2018, IEEE, pp. 642-644.*

A New Condition Indicator for Slow-Rotating Roller Chains based on the Angle and Torque of the Driving Motor

Bibtex entry :

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[SK18]

[PDFBIB](#)

Simon, H. and Kowalewski, S., "Mode-Aware Concolic Testing for PLC Software", in *Proc. Integrated formal methods : 14th International Conference, IFM 2018, Maynooth, Ireland, September 5-7, 2018 : proceedings / Carlo A. Furia, Kirsten Winter (eds.)*, Cham, 2018 in *Lecture notes in computer science*, Springer, pp. 367-376.

Mode-Aware Concolic Testing for PLC Software

Bibtex entry :

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@inproceedings { SK18,
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  booktitle = { Integrated formal methods : 14th International
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  pages = { 367-376 },
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  year = { 2018 },
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  organization = { 14. International Conference on Integrated Formal
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[STK18]

[PDFBIB](#)

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Structural Concolic Testing for Sequential Function Chart

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@article { STK18,
  author = { Simon, Hendrik and Triefenbach, Lucas and Kowalewski,
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  title = { Structural Concolic Testing for Sequential Function Chart
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  journal = { IFAC-PapersOnLine },
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Castellammare
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[Ter18]

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  author = { Terber, Matthias },
  othercontributors = { Kowalewski, Stefan and Rumpe, Bernhard },
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  publisher = { RWTH Aachen University, Department of Computer
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  pages = { 1 Online-Ressource (xvi, 134 Seiten) : Illustrationen },
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[TK18]

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@article { TK18,  
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[TK18a]

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[TRR+18a]

[PDFBIB](#)

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@inproceedings { TRR+18a,
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http://publications.rwth-aachen.de/record/752982/files/752982.pdf },
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[WKJ+18]

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[WLB+18]

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Woopen, T., Lampe, B., Böddeker, T., Eckstein, L., Kampmann, A., Alrifae, B., Kowalewski, S., Moormann, D., Stolte, T., Jatzkowski, I., Maurer, M., Möstl, M., Ernst, R., Ackermann, S., Amersbach, C., Winner, H., Püllen, D., Katzenbeisser, S., Leinen, S., Becker, M., Stiller, C., Furmans, K., Bengler, K., Diermeyer, F., Lienkamp, M., Keilhoff, D., Reuss, H., Buchholz, M., Dietmayer, K., Lategahn, H., Siepenkötter, N., Elbs, M., v. Hinüber, E., Dupuis, M., and Hecker, C., "UNICARagil - Disruptive Modular Architectures for Agile, Automated Vehicle Concepts", in *Proc. 27. Aachen Colloquium Automobile and Engine Technology : October 8th-10th, 2018, Eurogress Aachen, Germany / scientific management: Univ.-Prof. Dr.-Ing. Lutz Eckstein, Univ.-Prof. Dr.-Ing. Stefan Pischinger ; organizational management: Benedikt Hammermüller (M. Sc.), Dipl.-Ing. Rainer Wolsfeld ; organized by: Institute for Automotive Engineering (RWTH Aachen), Institute for Combustion Engines (RWTH Aachen), Aachen, 2018, Institute for Automotive Engineering, RWTH Aachen, pp. 663-694.*

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@inproceedings { WLB+18,
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Torben and Jatzkowski, Inga and Maurer, Markus and
M{"o}stl, Mischa and Ernst, Rolf and Ackermann, Stefan and
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Dominik and Katzenbeisser, Stefan and Leinen, Stefan and
Becker, Matthias and Stiller, Christoph and Furmans, Kai and
Bengler, Klaus and Diermeyer, Frank and Lienkamp, Markus and
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    Hin{"u}ber, Edgar and Dupuis, Marius and Hecker, Christian },
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[WSA+18]

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Bibtex entry :

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@article { WSA+18,
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author = { Winter, Alfred and St{"a}ubert, Sebastian and Ammon,
Danny
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Silke Dorothee and Hahn, Udo and Henkel, Andreas and
Kirsten, Toralf and Kl{"o}ss, Thomas and Lippert, J{"o}rg
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Oliver and Maschmann, Jens and Meister, Sven and
Mikolajczyk, Rafael and N{"u}chter, Matthias and Pletz,
Mathias W. and Rahm, Erhard and Riedel, Morris and Saleh,
Kutaiba and Schuppert, Andreas and Smers, Stefan and
Stollenwerk, Andr{e} and Uhlig, Stefan and Wendt, Thomas and
Zenker, Sven and Fleig, Wolfgang and Marx, Gernot and
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(SMITH)
: Data Integration based on Interoperability Standards },
journal = { Methods of information in medicine },
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[AMA17]

[PDFBIB](#)

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Bibtex entry :

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@inproceedings { AMA17,
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and
Applications : Kohala Coast, Hawai'i, August 27-30, 2017 :
CCTA 2017 / IEEE, CSS, IEEE Robotics & Automation Society,
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Applications, Mauna Lani, HI (USA), 2017-08-27 - 2017-08-30 },
doi = { 10.1109/CCTA.2017.8062778 },
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[BHK+17]

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author = { Brendle, Christian and Hackmack, K.-F. and K{\u}hn, Jan
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Stefan and Leonhardt, Steffen and Walter, Marian and
Misgeld, Berno Johannes Engelbert },
title = { Closed-loop control of extracorporeal oxygen and carbon
dioxide gas transfer },
journal = { Control engineering practice },
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pages = { 173-182 },
volume = { 59 },
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die Therapie des Lungenversagens (ECLA-VENT) (224967929) },
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[BHK17]

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Bibtex entry :

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[BMK+17]

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[CMW+17]

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  30.-31. Mai 2017 Stuttgart, Germany / Peter Dencker, Herbert
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  Zuverl{"a"}ssigkeit f{"u"}r automobile Informationstechnik,
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[DDK+17]

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  author = { Dankert, Jens and Dernehl, Christian and Kusmenko,
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    Februar 2017, Stadthalle, Braunschweig / ITS automotive nord
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year = { 2017 },
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Automatisiertes und
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http://www.se-rwth.de/publications/RapidCoop-Robuste-Architektur-durch-
geeignete-Paradigmen-fuer-Kooperativ-Interagierende-
Automobile.pdf?PHPSESSID=eb66ba2042d9500e5135d33f6b7575af },
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```

[DKK17]

[PDFBIB](#)

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Case studies on automated verification with slope boundaries for block diagrams

Bibtex entry :

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@article { DKK17,
  author = { Dernehl, Christian and K{"u}hn, Jan and Kowalewski,
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  journal = { Computer Languages, Systems & Structures },
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  pages = { 528-543 },
  volume = { 54 },
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}

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[DSF+17]

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eNav: A Suitable Navigation System for the Disabled

Bibtex entry :

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@inproceedings { DSF+17,  
  author = { Dzafic, Dzenan and Schoonbrood, Pierre and Franke,  
    Dominik  
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```

[DWS+17]

[PDFBIB](#)

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Multimodales Dynamisches Routen mit eNav

Bibtex entry :

```
@article { DWS+17,  
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pages = { 278-287 },
volume = { 2017 },
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organization = { 29. Symposium f{"u}r Angewandte Geoinformatik,
Salzburg
(Austria), 2017-07-05 - 2017-07-07 },
typ = { PUB:(DE-HGF)16 },
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```

[DWS+17a]

[PDFBIB](#)

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Bibtex entry :

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@inproceedings { DWS+17a,
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Peter
and Franke, Dominik and Kowalewski, Stefan },
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  booktitle = { Proceedings International Conference on Intelligent
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  pages = { 1-10 },
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Systems in
Theory and Practice, M{"u}nchen (Germany), 2017-07-04 -
2017-07-05 },
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  cin = { 122810 / 120000 / 414110 },
  url = { http://publications.rwth-aachen.de/record/752277 },
}

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[FD17]

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Bibtex entry :

```
@inproceedings { FD17,
  author = { Fonck, Simon Ansgar Martin and Deserno, Thomas },
  title = { Modeling an IT Support for Handling Serious Adverse
Events
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informatics :
    proceedings of the 16th World Congress on Medical and Health
Informatics / edited by Adi V. Gundlapalli (University of
Utah/VA Salt Lake City Health Care System), Marie-Christine
Jaulent (DR Inserm) and Dongsheng Zhao (Academy of Military
Medical Science of China) },
  publisher = { IOS Press },
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  year = { 2017 },
  address = { Amsterdam },
  organization = { 16. World Congress on Medical and Health
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http://publications.rwth-aachen.de/record/716886/files/716886.pdf },
}
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[GAK17]

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Bibtex entry :

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@inproceedings { GAK17,  
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  booktitle = { 2017 22nd IEEE International Conference on Emerging  
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  publisher = { IEEE },  
  pages = { 8 Seiten },  
  year = { 2017 },  
  address = { Piscataway, NJ },  
  organization = { 22. IEEE International Conference on Emerging  
Technologies  
and Factory Automation, Limassol (Cyprus), 2017-09-12 -  
2017-09-15 },  
  doi = { 10.1109/ETFA.2017.8247575 },  
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  cin = { 122810 / 120000 },  
  url = { http://publications.rwth-aachen.de/record/722221 },  
}
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[Ger17]

[PDFBIB](#)

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Bibtex entry :

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  author = { Gerlitz, Thomas },  
  othercontributors = { Kowalewski, Stefan and Schaefer, Ina },  
  title = { Incremental Integration and Static Analysis of Model-  
Based  
Automotive Software Artifacts },  
  publisher = { RWTH Aachen University, Department of Computer  
Science },  
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  pages = { 1 Online-Ressource (xv, 191 Seiten) : Diagramme },  
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year = { 2017 },
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url = {
http://publications.rwth-aachen.de/record/706814/files/706814.pdf },
}

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[HWK+17]

[PDFBIB](#)

Hansen, N., Wiechowski, N., Kugler, A., Kowalewski, S., Rambow, T., and Busch, R., "Model-in-the-Loop and Software-in-the-Loop Testing of Closed-Loop Automotive Software with Arttest", in *Proc. Informatik 2017 : 25.-29. September 2017, Chemnitz : proceedings / Maximilian Eibl, Martin Gaedke (Hrsg.)*, Bonn, 2017 in GI-Edition : lecture notes in informatics. Proceedings, Gesellschaft für Informatik, pp. 1537-1549.

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@inproceedings { HWK+17,
  author = { Hansen, Norman and Wiechowski, Norbert and Kugler,
Alexander
and Kowalewski, Stefan and Rambow, Thomas and Busch, Rainer },
title = { Model-in-the-Loop and Software-in-the-Loop Testing of
Closed-Loop Automotive Software with Arttest },
booktitle = { Informatik 2017 : 25.-29. September 2017, Chemnitz :
proceedings / Maximilian Eibl, Martin Gaedke (Hrsg.) },
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series = { GI-Edition : lecture notes in informatics. Proceedings
},
year = { 2017 },
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organization = { 47. Jahrestagung der Gesellschaft f{"u}r
Informatik e.V.
(GI), Chemnitz (Germany), 2017-09-25 - 2017-09-29 },
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cin = { 122810 / 120000 },
url = { https://dl.gi.de/handle/20.500.12116/21 },
}

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[Kal17]

[PDFBIB](#)

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A real-time capable, open-source-based platform for off-the-shelf embedded devices

Bibtex entry :

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@phdthesis { Kal17,
  author = { Kalkov, Igor },
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[KBS+17]

[PDFBIB](#)

Kühn, J., Brendle, C., Stollenwerk, A., Schweigler, M., Kowalewski, S., Janisch, T., Rossaint, R., Leonhardt, S., Walter, M., and Kopp, R., "Decentralized safety concept for closed-loop controlled intensive care : Supervision of a blood pump during extracorporeal circulation", *Biomedical engineering = Biomedizinische Technik*, vol. 62, iss. 2, pp. 213-224, 2017

Decentralized safety concept for closed-loop controlled intensive care : Supervision of a blood pump during extracorporeal circulation

Bibtex entry :

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@article { KBS+17,
  author = { K{\\"u}hn, Jan and Brendle, Christian and Stollenwerk,
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[KGK17]

[PDFBIB](#)

Kalkov, I., Gurchian, A., and Kowalewski, S., "Explicit prioritization of parallel Intent broadcasts in real-time Android", in *Proc. Concurrency and computation*, Chichester, 2017, vol. 29, Wiley.

Explicit prioritization of parallel Intent broadcasts in real-time Android

Bibtex entry :

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@inproceedings { KGK17,
    author = { Kalkov, Igor and Gurchian, Alexandru and Kowalewski,
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[KKR+17]

PDFBIB

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Bibtex entry :

```
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      Automobil- und Motorentechnik, Stuttgart (Germany),
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}
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[Leo17]

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Bibtex entry :

```
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  author = { Leonhardt, Steffen },
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title = { Special Issue: Smart Life Support },
booktitle = { Biomedical engineering = Biomedizinische Technik },
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[NKM+17]

[PDFBIB](#)

Nowack, J., Kugler, C., Maquet, R., Richenhagen, J. M., and Remelhe, F., "Continuous process for the validation of transmission controls." 2017.

Continuous process for the validation of transmission controls

Bibtex entry :

```

@inproceedings { NKM+17,
  author = { Nowack, Jan and Kugler, Christopher and Maquet, Ralf and
    Richenhagen, Johannes Martin and Remelhe, Filipe },
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nsmission-controls/ },
}

```

[OK17]

[PDFBIB](#)

Obster, M. and Kowalewski, S., "A live static code analysis architecture for PLC software", in *Proc. 2017 22nd IEEE International Conference on Emerging Technologies and Factory Automation : September 12-15, 2017, Limassol, Cyprus / ABB, IEEE, IES, University of Cyprus*, Piscataway, NJ, 2017, IEEE, p. 4.

A live static code analysis architecture for PLC software

Bibtex entry :

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```

[SAB+17]

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HyPro : A C++ Library of State Set Representations for Hybrid Systems Reachability Analysis

Bibtex entry :

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@inproceedings { SAB+17,
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NFM 2017,
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    Clark Barrett, Misty Davies, Temesghen Kahsai (eds.) },
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  pages = { 288-294 },
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address = { Cham },
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Field, CA
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doi = { 10.1007/978-3-319-57288-8_20 },
typ = { PUB:(DE-HGF)7 },
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}

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[SKS+17]

[PDFBIB](#)

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Tauchcomputerunterstützung durch vernetzte Smart Wearables

Bibtex entry :

```

@article { SKS+17,
  author = { Stollenwerk, André and Kopp, R{"u}dger and Sehl,
Florian
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}

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[SPD+17]

[PDFBIB](#)

Schmidt, T., Philipsen, R., Dzafic, D., and Ziefle, M., "Watch Out! : User-Centered Feedback Design for a V2X-Smartphone App", in *Proc. Digital Human Modeling. Applications in Health, Safety, Ergonomics, and Risk Management: Health and Safety : 8th International Conference, DHM 2017, Held as Part of HCI International 2017, Vancouver, BC, Canada, July 9-14, 2017, Proceedings, Part II / edited by Vincent G. Duffy*, Cham, 2017 in *Lecture Notes in Computer Science*, Springer International Publishing, pp. 365-383.

Watch Out! : User-Centered Feedback Design for a V2X-Smartphone App

Bibtex entry :

```
@inproceedings { SPD+17,
  author = { Schmidt, Teresa and Philipsen, Ralf and Dzafic, Dzenan
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V2X-Smartphone App },
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International Conference, DHM 2017, Held as Part of HCI
International 2017, Vancouver, BC, Canada, July 9-14, 2017,
Proceedings, Part II / edited by Vincent G. Duffy },
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  address = { Cham },
  organization = { 8. International Conference on Digital Human
Modeling and
  Applications in Health, Safety, Ergonomics and Risk
Management, Vancouver (Canada), 2017-07-09 - 2017-07-14 },
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}
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[SSK+17]

[PDFBIB](#)

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  author = { Smieschek, Manfred and Stollenwerk, André and
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Kowalewski,
    Stefan and Orlikowsky, Thorsten and Schoberer, Mark },
    title = { Unterst{"u}tzte Handerkennung in Thermographiebildern
zur
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Algorithmen -
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bis 14. M{"a}rz 2017 in Heidelberg / Klaus Hermann
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Tolxdorff (Herausgeber) },
    publisher = { Springer Berlin Heidelberg },
    pages = { 147-152 },
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Algorithmen -
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[SSM+17]

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    2017-05-09 - 2017-05-12 },
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[TRR+17]

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    author = { Th{"o"}nnessen, David and Reinker, Niklas and Rakel,
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[UVS+17]

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[WKK+17]

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  author = { Walter, Marian and Kunczik, Janosch and K{"u}hn, Jan
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  Janisch, Thorsten and Kopp, R{"u}dger and Leonhardt,
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  the European Medical and Biological Engineering Conference
  (EMBEC) and the Nordic-Baltic Conference on Biomedical
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  Editors: Jennika Karvinen, Janne Koivisto, Sampo Tuukkanen,
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  publisher = { BioMediTech Institute and Faculty of Biomedical
  Sciences and
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  pages = { 365, 150-150 },
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2017-04-04
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    url = { http://publications.rwth-aachen.de/record/752280 },
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[Ben16]

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  author = { Ben Makhoulf, Ibtissem },
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  title = { Comparative evaluation and improvement of computational
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  pages = { viii, 221 Seiten : Illustrationen, Diagramme },
  series = { Aachener Informatik-Berichte },
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[BHK+16]

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  title = { Continuous gas transfer monitoring during extracorporeal
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  journal = { Biomedical signal processing and control },
  publisher = { Elsevier },
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  year = { 2016 },
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  url = { http://publications.rwth-aachen.de/record/678132 },
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  author = { Biallas, Sebastian },
  othercontributors = { Kowalewski, Stefan and Fay, Alexander },
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pages = { 1 Online-Ressource (x, 153 Seiten) : Illustrationen,
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[BK16]

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            Automobilbereich },
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                Ulrich Jumar, Christian Diedrich (Hrsg.) ; eine Kooperation
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  publisher = { Institut f{"u}r Automation und Kommunikation e.V.
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                Magdeburg) },
  pages = { 1-10 },
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  address = { Magdeburg },
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Automatisierungssysteme,
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[BSF+16]

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Concolic test generation for PLC programs using coverage metrics

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Nico
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Systems
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Christos G. Cassandras, Alessandro Giua, Zhiwu Li ;
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  address = { Piscataway, NJ },
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Systems, Xi'an
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    }

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  author = { Dernehl, Christian and Hansen, Norman and Kowalewski,
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  publisher = { Springer International Publishing },
  pages = { 25-38 },
  series = { Lecture Notes in Computer Science },
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[DHK16a]

[PDFBIB](#)

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  publisher = { Springer International Publishing },
  pages = { 137-154 },
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[DKK16]

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[DKS+16]

[PDFBIB](#)

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  author = { Dzafic, Dzenan and Klein-Ridder, Daniel and Schoonbrood,
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[DLS+16]

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[GHD+16]

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(Universit{"a}t Hamburg, DE), Bernhard Sch{"a}tz (fortiss
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[GK16]

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[GK16a]

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[GNK16]

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[KSB+16]

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[KVS+16]

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[SK16]

[PDFBIB](#)

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[SSJ+16]

[PDFBIB](#)

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[SSS16]

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[SSS16a]

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Ina Schaefer, Constantin Scheuermann, Alexander Schlaefer,
Sibylle Schupp, Andreas Seitz, Andreas Steffens, André
Stollenwerk, R{"u"}diger Wei{"s"}bach },
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    author = { Th{"o"}nnessen, David and Schweigler, Martin and Ney,
Oliver
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https://worldwide.espacenet.com/patent/search?q=pn%3DUS20180081372A1 },
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[WBK+16]

[PDFBIB](#)

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[ZAB+16]

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Andreas and Steffens, Andreas and Stollenwerk, André and
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[BFS+15]

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[BGK15]

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[BHK+15]

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  author = { Brendle, Christian and Hackmack, Kay-Florian and
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[BK15a]

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[BSK+15]

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[CSB+15]

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[DHG+15]

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[Dia15]

[PDFBIB](#)

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[DKF+15]

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[dMK+15]

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[FKL15]

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[GSK15]

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[GTD15]

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[HBS+15]

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      Oslo, Norway, June 24 - 26, 2015 ; proceedings / Nikolaj
      Bjørner; Frank de Boer (eds.) },
  publisher = { Cham },
  pages = { 585-588 },
  series = { Lecture Notes in Computer Science },
  year = { 2015 },
  address = { Springer International Publishing },
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[JMR+15]

[PDFBIB](#)

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Bibtex entry :

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        Kinabalu, Malaysia, 31 May - 3 June 2015 ; proceedings /
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[KGK15]

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    booktitle = { Proceedings of the 13th International Workshop on
Java
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[KKO+15]

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  author = { Kowalewski, Stefan and Kalkov, Igor and Obster, Mathias
and
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[KSB+15]

[PDFBIB](#)

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  author = { K{"u"}hn, Jan and Stollenwerk, André and Brendle,
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[KSK+15]

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  author = { K{"u}hn, Jan and Stollenwerk, André and Kowalewski,
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die Therapie des Lungenversagens (ECLA-VENT) (224967929) },
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  publisher = { IEEE },
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  doi = { 10.1109/Trustcom.2015.377 },
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[KSS+15]

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    Kowalewski, Stefan and Kopp, R{"u}dger },
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[KWS+15]

[PDFBIB](#)

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    author = { K{"u}hn, Jan and W{"u}bbels, Nico and Stollenwerk,
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[Pol15]

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[SAC+15]

[PDFBIB](#)

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[SFB+15]

[PDFBIB](#)

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Bibtex entry :

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[SKW+15]

[PDFBIB](#)

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Bibtex entry :

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    author = { Stollenwerk, André and K{"u}hn, Jan and Walter, Marian
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}

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[SLR+15]

[PDFBIB](#)

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[AFK+14]

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  url = { http://publications.rwth-aachen.de/record/225590 },  
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[DBB+14]

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Towards an Indoor Traffic Report - Requirements for Dynamic Route Planning for Wheelchair Users

Bibtex entry :

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@inproceedings { DBB+14,
  author = { Dzafic, Dzenan and Bitsch, Jó Ágila and Baumeister,
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  title = { Towards an Indoor Traffic Report - Requirements for
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    Route Planning for Wheelchair Users },
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    Navigation (IPIN), 2012 : 13 - 15 Nov. 2012, Sydney,
    Australia ; conference proceedings / organized by UNSW
    Australia, the University of New South Wales, Australia. Ed.
    by Chris Rizos ... },
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[DF14]

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@inproceedings { DF14,
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}

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  author = { F{"o"}rster, Marc and Auerswald, Marko and Keldenich,
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@inproceedings { FK14,
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    papers / Antonio Cerone; Donatella Persico; Sara Fernandes;
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Quantitative
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[Guc14]

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@phdthesis { Guc14,
    author = { G{"u"}ckel, Dominique },
    othercontributors = { Kowalewski, Stefan and Leupers, Rainer },
    title = { Synthesis of state space generators for model checking
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    publisher = { Fachgruppe Informatik, RWTH Aachen University },
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Department
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[JGN14]

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  author = { Kalkov, Igor and Gurghian, Alexandru and Kowalewski,
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  author = { Kowalewski, Stefan and Ringert, Jan Oliver and Rumpe,
Bernhard },
  title = { Editorial for the Software Engineering 2013 Conference },
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[Mer14]

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Merschen, D., "Integration und Analyse von Artefakten in der modellbasierten Entwicklung eingebetteter Software", PhD Thesis, Aachen, 2014.

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Bibtex entry :

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@phdthesis { Mer14,
  author = { Merschen, Daniel },
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[OKK14]

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Obster, M., Kalkov, I., and Kowalewski, S., "Development and Execution of PLC Programs on Real-Time Capable Mobile Devices", in *Proc. 2014 IEEE [International Conference on] Emerging Technologies and Factory Automation (ETFA 2014) : Barcelona, Spain, 16 - 19 September 2014 / [co-sponsored by Universitat Politècnica de Catalunya - Barcelona Tech (UPC); IEEE Industrial Electronics Society]*, Piscataway, NJ, 2014, IEEE, p. 8.

Development and Execution of PLC Programs on Real-Time Capable Mobile Devices

Bibtex entry :

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@inproceedings { OKK14,
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[Pal14]

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Palczynski, J., "Time continuous behaviour comparison based on abstract models", PhD Thesis, Aachen, 2014.

Time continuous behaviour comparison based on abstract models

Bibtex entry :

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@phdthesis { Pal14,
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[RBH+14]

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@article { RBH+14,  
  author = { Reinbacher, Thomas and Brauer, J{"o}rg and Horauer,  
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[SBS+14]

[PDFBIB](#)

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Applying Static Code Analysis on Industrial Controller Code

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@inproceedings { SBS+14,
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  booktitle = { 2014 IEEE [International Conference on] Emerging
    Technologies and Factory Automation (ETFA 2014) : Barcelona,
    Spain, 16 - 19 September 2014 / [co-sponsored by Universitat
    Politècnica de Catalunya - Barcelona Tech (UPC); IEEE
    Industrial Electronics Society] },
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[SKB+14]

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Bibtex entry :

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  author = { Stollenwerk, André and K{"u}hn, Jan and Brendle,
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[VDF+14]

[PDFBIB](#)

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  author = { Vogel-Heuser, Birgit and Diedrich, Christian and Fay,
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[WSL+14]

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[BBK13]

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pages = { 320-329 },
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[PMS+13]

[PDFBIB](#)

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Robust Control of End-Tidal CO₂ using the H_∞ Loop-Shaping Approach

Bibtex entry :

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@article { PMS+13,
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http://publications.rwth-aachen.de/record/231825/files/231825.pdf },
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[Rek13]

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Modellbasierte Entwicklung automobiler Steuerungssysteme in kleinen und mittelständischen Unternehmen

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@phdthesis { Rek13,
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url = {
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}

```

[SGK13]

[PDFBIB](#)

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Load and Quality Cooperation for Distributed Embedded Systems Using Different Modes of Operation

Bibtex entry :

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@inproceedings { SGK13,
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}

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[Sto13]

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@phdthesis { Sto13,  
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[VK13]

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@article { VK13,  
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[WBS+13]

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[WGM+13]

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[WSB+13]

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@article { WSB+13,
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[BBK+12]

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[BBK12]

[PDFBIB](#)

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author = { Beckschulze, Eva and Biallas, Sebastian and Kowalewski,
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pages = { 103-114 },
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}

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[BBK12a]

[PDFBIB](#)

Beckschulze, E., Brauer, J., and Kowalewski, S., "Access-Based Localization for Octagons",
Electronic notes in theoretical computer science : ENTCS, vol. 287, pp. 29-40, 2012

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Bibtex entry :

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@article { BBK12a,
  author = { Beckschulze, Eva and Brauer, J{"o}rg and Kowalewski,
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[BBK12b]

[PDFBIB](#)

Biallas, S., Brauer, J., and Kowalewski, S., "Arcade.PLC : a Verification Platform for Programmable Logic Controllers", in *Proc. 2012 proceedings of the 27th IEEE/ACM International Conference on Automated Software Engineering (ASE 2012) : Essen, Germany, 3 - 7 September 2012*, Piscataway, NJ, 2012, IEEE, pp. 338-341.

Arcade.PLC : a Verification Platform for Programmable Logic Controllers

Bibtex entry :

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@inproceedings { BBK12b,
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[BDK12]

[PDFBIB](#)

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Safety Verification of a Controlled Cooperative Platoon Under Loss of Communication Using Zonotopes

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[BHK+12]

[PDFBIB](#)

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Bibtex entry :

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@inproceedings { BHK+12,
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[BK12]

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Bibtex entry :

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@inproceedings { BK12,
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[BK12a]

[PDF](#)[BIB](#)

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Transfer function synthesis without quantifier elimination

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[BKN12]

[PDFBIB](#)

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A Native Approach to Modeling Timed Behavior in the Pi-Calculus

Bibtex entry :

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[BKS12]

[PDFBIB](#)

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[PDFBIB](#)

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Verifikation für SPS-Programme

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Bibtex entry :

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@inproceedings { BKS12b,  
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  author = { Brauer, J{\\"o}rg and Schlich, Bastian and Kowalewski,
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    issn = { 1571-0661 },
    organization = { 4. International Workshop on Numerical and
Symbolic Abstract
    Domains (France), 10-09-2010 },
    doi = { 10.1016/j.entcs.2009.09.059 },
    typ = { PUB:(DE-HGF)16 },
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  author = { Franke, Dominik and Elsemann, Corinna and Kowalewski,
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Situation
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  author = { F{"o}rster, Marc },
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50_40107 },
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    author = { H{"a}nsch, Paul and Kowalewski, Stefan },
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RP 2012,
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@inproceedings { KFS+12,
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[MEJ+12]

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  pages = { 121-126 },
  year = { 2012 },
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  url = { http://publications.rwth-aachen.de/record/207392 },
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[MHL+12]

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  organization = { System, Software, SoC and Silicon Debug
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    http://ieeexplore.ieee.org/xpls/abs_all.jsp?arnumber=6338153 },
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[Mic12]

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Konzepte für eine virtuelle Integration von AUTOSAR-konformer Fahrzeug-Software in frühen Entwicklungsphasen

Bibtex entry :

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@phdthesis { Mic12,
  author = { Michailidis, Alexander A. },
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typ = { PUB:(DE-HGF)11 },
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url = { http://publications.rwth-aachen.de/record/64327 },
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[Mit12]

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Mitsching, R., "Applied timed testing: Testautomatisierung in industriellen Testprozessen von eingebetteten Systemen", PhD Thesis, Aachen, 2012.

Applied timed testing: Testautomatisierung in industriellen Testprozessen von eingebetteten Systemen

Bibtex entry :

```
@phdthesis { Mit12,
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[MPK12]

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Integration and Analysis of Design Artefacts in Embedded Software Development

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@inproceedings { MPK12,
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        Conference workshops (COMPSACW), 2012 : 16 - 20 July 2012,
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    pages = { 503-508 },
    year = { 2012 },
    address = { Piscataway, NJ },
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    doi = { 10.1109/COMPSACW.2012.94 },
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[PBD+12]

[PDF](#)[BIB](#)

Pleuss, A., Botterweck, G., Dhungana, D., Polzer, A., and Kowalewski, S., "Model-driven support for product line evolution on feature level", *The journal of systems and software : JSS*, vol. 85, iss. 10, pp. 2261-2274, 2012

Model-driven support for product line evolution on feature level

Bibtex entry :

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@article { PBD+12,
    author = { Pleuss, Andreas and Botterweck, G{"o"}tz and Dhungana,
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    url = { http://publications.rwth-aachen.de/record/211937 },
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@inproceedings { RDK+12,
  author = { Reuter, Sebastian and Diab, Hilal and Kowalewski, Stefan
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sponsored by IEEE Robotics and Automation Society (RAS) ... },
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[SFL+12]

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@inproceedings { SFL+12,
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  author = { Sheng, Weihua and Wiebe, Artur and Stulova, Anastasia
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[WBB+12]

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  author = { Walter, Marian and Brendle, Christian and Bensberg, Ralf
and
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  doi = { 10.1007/978-3-642-23508-5_83 },
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  author = { Walter, Marian and Brendle, Christian and Stollenwerk,
      André and Kopp, R{"u}dger and Arens, Jutta and Bensberg,
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  url = {
http://www.scai-med.org/meetings/2012Iccai/2012iccaiprogram.pdf },
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Introducing Timers to Pi-Calculus

Bibtex entry :

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@techreport { Bar11,
  author = { Barakat, Kamal },
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  pages = { 31 },
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[BBD+11]

[PDFBIB](#)

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  author = { Beckschulze, Eva and Boymanns, David and D{"u}lks,
Ramon
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    and Salewski, Falk and Siegbert, Thomas },
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Bibtex entry :

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@inproceedings { BBK+11,
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[BBK11]

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Bibtex entry :

```
@inproceedings { BBK11,
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[BBS+11]

[PDFBIB](#)

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Analyzing Embedded Systems Code for Mixed-Critical Systems Using Hybrid Memory Representations

Bibtex entry :

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[BBS+11a]

[PDFBIB](#)

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  author = { Brendle, Christian and Bensberg, Ralf and Stollenwerk,
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  journal = { Biomedizinische Technik = Biomedical Engineering },
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  pages = { 4 Seiten },
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  url = { http://dx.doi.org/10.1515/BMT.2011.811 },
}

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[BBS+11b]

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Patient Orientated Automation of the Therapy with the Extracorporeal Membrane Oxygenation (ECMO)

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@inproceedings { BBS+11b,
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[BK11]

[PDFBIB](#)

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Bibtex entry :

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@inproceedings { BK11,
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[BK11a]

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Bibtex entry :

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  author = { Brauer, J{"o}rg and King, Andy },
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Saarbr{"u}cken
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[BKK11]

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Existential Quantification as Incremental SAT

Bibtex entry :

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@inproceedings { BKK11,
  author = { Brauer, J{\o}rg and King, Andy and Kriener, Jael },
  title = { Existential Quantification as Incremental SAT },
  booktitle = { Computer aided verification : 23rd international
conference,
    CAV 2011, Snowbird, UT, USA, July 14-20, 2011 ; proceedings
    / Ganesh Gopalakrishnan; Shaz Qadeer (eds.) },
  publisher = { Springer },
  pages = { 191-207 },
  series = { Lecture notes in computer science },
  year = { 2011 },
  address = { Heidelberg [u.a.] },
  organization = { Computer aided verification : 23. international
conference,
    Snowbird, UT (USA), 2011-07-14 - 2011-07-20 },
  doi = { 10.1007/978-3-642-22110-1 },
  typ = { PUB:(DE-HGF)7 },
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  cin = { 122810 / 120000 },
  url = { http://publications.rwth-aachen.de/record/126209 },
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[BKS11]

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@inproceedings { BKS11,
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author = { Biallas, Sebastian and Kowalewski, Stefan and Schlich,
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title = { Leistungs{\'a}hige Verifikation von industriellen
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booktitle = { 'Zukunft verantwortungsvoll gestalten' : Automation
2011 ;
           der 12. Branchentreff der Mess- und Automatisierungstechnik
           ; Kongress Baden-Baden, 28. und 29. Juni 2011 /
           VDI/VDE-Gesellschaft Mess- und Automatisierungstechnik.
           [Kongressleiter: Peter Adolphs ...] },
publisher = { VDI-Verl. },
pages = { 67-72 },
series = { VDI-Berichte },
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address = { D{\'u}sseldorf },
organization = { 12. Branchentreff der Mess- und
Automatisierungstechnik,
           Baden-Baden (Germany), 2011-06-28 - 2011-06-29 },
typ = { PUB:(DE-HGF)8 },
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url = { http://publications.rwth-aachen.de/record/118212 },
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[BMH+11]

[PDFBIB](#)

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Safety Verification of a Cooperative Vehicle Platoon with Uncertain Inputs Using Zonotopes

Bibtex entry :

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@inproceedings { BMH+11,
  author = { Ben Makhoulf, Ibtissem and Maschuw, Jan P. and
H{\'a}nsch,
           Paul and Diab, Hilal and Kowalewski, Stefan and Abel, Dirk },
  title = { Safety Verification of a Cooperative Vehicle Platoon
withUncertain Inputs Using Zonotopes },
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    url = { http://publications.rwth-aachen.de/record/100991 },
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[BRT11]

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Brauer, J., Roveri, M., and Tews, H., "Proceedings of the 6th International Workshop on Systems Software Verification (SSV 2011)", , Dresden, TUD-FI11-02-August 2011, 2011.

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@techreport { BRT11,
    author = { Brauer, J{"o}rg and Roveri, Marco and Tews, Hendrik },
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[DFD+11]

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pages = { 138-145 },
year = { 2011 },
organization = { International Micro Air Vehicle conference and
competitions
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doi = { 10.4233/uuid:19adedb6-e3d9-4cff-8ebc-6497b026adfe },
typ = { PUB:(DE-HGF)8 },
reportid = { RWTH-CONV-198392 },
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[FDW+11]

[PDFBIB](#)

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booktitle = { Anwenderkonferenz f{"u}r Freie und Open Source
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organization = { Anwenderkonferenz f{"u}r Freie und Open Source
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  author = { Franke, Dominik and Dzafic, Dzenan and Weise, Carsten
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  Kowalewski, Stefan },
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  year = { 2011 },
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Symposium },
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http://gispoint.de/fileadmin/user_upload/paper_gis_open/537508024.pdf
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[FEW+11]

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  publisher = { IEEE },  
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  year = { 2011 },  
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  url = { http://publications.rwth-aachen.de/record/227967 },  
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[FW11]

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  title = { Providing a Software Quality Framework for Testing of  
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  booktitle = { Proceedings / Fourth IEEE International Conference on  
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publisher = { IEEE },
pages = { 431-434 },
year = { 2011 },
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organization = { 4. IEEE International Conference on Software
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    Verification, and Validation, Berlin (Germany), 2011-03-21 -
    2011-03-25 },
doi = { 10.1109/ICST.2011.18 },
typ = { PUB:(DE-HGF)8 },
reportid = { RWTH-CONV-196799 },
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url = { http://publications.rwth-aachen.de/record/126463 },
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    author = { G{"u"}ckel, Dominique and Kowalewski, Stefan },
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        Architecture. Technische Universit{"a"}t Dresden,
        Fakult{"a"}t Informatik. J{"o"}rg Brauer ... (ed.) },
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    address = { Dresden },
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Verification,
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}

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[GKK+11]

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Bibtex entry :

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  author = { Grobosch, Sebastian and Kamin, Volker and Krirkkawin,
    Kriengkrai and Kowalewski, Stefan },
  title = { Using Timed Automata in Requirements Analysis for Engine
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[HSK11]

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Hänsch, P., Schommer, J. F., and Kowalewski, S., "Self-balancing Controllable Robots in Education: A Practical Course for Bachelor Students", in *Proc. Intelligent robotics and applications : 4th international conference, ICIRA 2011, Aachen, Germany, December 6 - 8, 2011 ; proceedings / Sabina Jeschke; Honghai Liu; Daniel Schilberg (eds.)*, Berlin, Heidelberg, 2011 in Lecture notes in computer science : Lecture notes in artificial intelligence, Springer Verlag, pp. 297-306.

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  author = { H{"a}nsch, Paul and Schommer, John F. and Kowalewski,
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  title = { Self-balancing Controllable Robots in Education: A
    Practical
      Course for Bachelor Students },
  booktitle = { Intelligent robotics and applications : 4th
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      conference, ICIRA 2011, Aachen, Germany, December 6 - 8,
      2011 ; proceedings / Sabina Jeschke; Honghai Liu; Daniel
      Schilberg (eds.) },
  publisher = { Springer Verlag },
  pages = { 297-306 },
  series = { Lecture notes in computer science : Lecture notes in
    artificial intelligence },
  year = { 2011 },
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  organization = { Intelligent robotics and applications : 4.
    international
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  doi = { 10.1007/978-3-642-25489-5_29 },
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[KBW+11]

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Kopp, R., Bensberg, R., Walter, M., Arens, J., Rossaint, R., and Stollenwerk, A., "Automation of extracorporeal membrane oxygenation using a combined safety and control concept", in *Proc. Intensive care medicine*, Berlin [u.a.], 2011, vol. 37, Springer, pp. 230-230.

Automation of extracorporeal membrane oxygenation using a combined safety and control concept

Bibtex entry :

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  author = { Kopp, R{"u}dger and Bensberg, Ralf and Walter, Marian
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  booktitle = { Intensive care medicine },
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  pages = { 230-230 },
  volume = { 37 },
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year = { 2011 },
address = { Berlin [u.a.] },
issn = { 0340-0964 },
organization = { ESICM LIVES 2011 : 24. Annual Congress, Berlin
(Germany),
    2011-10-01 - 2011-10-05 },
doi = { 10.1007/s00134-011-2322-1 },
typ = { PUB:(DE-HGF)16 },
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[KRS+11]

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@article { KRS+11,
  author = { Kopp, R{\u}dger and Rossaint, Rolf and Schmitz-Rode,
Thomas
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  url = { http://publications.rwth-aachen.de/record/142316 },
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[KS11]

[PDFBIB](#)

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@conference { KS11,  
  author = { Kowalewski, Stefan and Stollenwerk, André },  
  title = { Supporting Evolving Requirements in CPS by Abstraction  
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  booktitle = { Workshop on Architectures for Cyber-Physical Systems,  
    Chicago, IL, USA },  
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}
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[MDA+11]

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Maschuw, J. P., Diab, H., Abel, D., and Kowalewski, S., "Control Design for Generalized Platoon Problems", *Automatisierungstechnik : at*, vol. 59, iss. 12, pp. 721-729, 2011

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@article { MDA+11,  
  author = { Maschuw, Jan P. and Diab, Hilal and Abel, Dirk and  
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[MPB+11]

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Experiences of Applying Model-based Analysis to Support the Development of Automotive Software Product Lines

Bibtex entry :

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@inproceedings { MPB+11,
  author = { Merschen, Daniel and Polzer, Andreas and Botterweck,
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Variability
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  doi = { 10.1145/1944892.1944910 },
  typ = { PUB:(DE-HGF)8 },
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  cin = { 122810 / 120000 },
  url = { http://publications.rwth-aachen.de/record/120031 },
}
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[MWB+11]

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TripleT: Improving Test Responsiveness for High Performance Embedded Systems

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  author = { Mitsching, Ralf and Weise, Carsten and Bohnenkamp,  
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Testing, Verification and Validation workshops (ICSTW 2011)  
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[sponsored by IEEE Computer Society] },  
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[MWF+11]

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  author = { Mitsching, Ralf and Weise, Carsten and Franke, Dominik  
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    Gerlitz, Thomas and Kowalewski, Stefan },  
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  author = { Reinbacher, Thomas and Steininger, Andreas and
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  title = { Hardware Support for Efficient Testing of Embedded
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@inproceedings { SSK+11,
    author = { Sasnauskas, Raimondas and Soria Dustmann, Oscar and
        Kaminski, Benjamin Lucien and Wehrle, Klaus and Weise,
        Carsten and Kowalewski, Stefan },
    title = { Scalable symbolic execution of distributed systems },
    booktitle = { 2011 31st International Conference on Distributed
Computing
        Systems, (ICDCS 2011) : Minneapolis, Minnesota, USA, 20 - 24
        June 2011 / IEEE. [Sponsored by IEEE Computer Society
        Technical Committee on Distributed Processing. David
        Hung-Chang Du, general chair] },
    publisher = { IEEE },
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    year = { 2011 },
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Computing
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[WBA+11]

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  author = { Walter, Marian and Brendle, Christian and Arens, Jutta
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  Stollenwerk, André and Kopp, R{"u}dger and Bensberg, Ralf
and Leonhardt, Steffen },
  title = { Physiological target control in long term extracorporeal
oxygenation },
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  year = { 2011 },
  address = { Milano [u.a.] },
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Porto
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[AdM+10]

[PDFBIB](#)

Arens, J., de Brouwer, P., Mager, I., Kopp, R., Walter, M., Stollenwerk, A., Schmitz-Rode, T., and Steinseifer, U., "A dynamic study on the hemolytic effect of negative pressure on blood", in *Proc. ASAIO journal*, Hagerstown, Md., 2010, vol. 56, Lippincott, pp. 96-96.

A dynamic study on the hemolytic effect of negative

pressure on blood

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  author = { Arens, Jutta and de Brouwer, Petra and Mager, Ilona and  
    Kopp, R{"u}dger and Walter, Marian and Stollenwerk, Andr{e}  
    and Schmitz-Rode, Thomas and Steinseifer, Ulrich },  
  title = { A dynamic study on the hemolytic effect of negative  
pressure  
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  publisher = { Lippincott },  
  pages = { 96-96 },  
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  url = { http://publications.rwth-aachen.de/record/165220 },  
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[Arm10]

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  author = { Armoush, Ashraf },  
  othercontributors = { Kowalewski, Stefan },  
  title = { Design patterns for safety-critical embedded systems },  
  publisher = { Publikationsserver der RWTH Aachen University },  
  pages = { XIV, 181 S. : graph. Darst. },  
  year = { 2010 },  
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}
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[BBG+10]

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@inproceedings { BBG+10,
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    http://i.unu.edu/unu/u/publication/000/001/286/report444.pdf },
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  author = { Biallas, Sebastian and Brauer, J{\o}rg and Kowalewski,
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title = { Counterexample-Guided Abstraction Refinement for PLCs },
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year = { 2010 },
organization = { 5. International Workshop on Systems Software
Verification,
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http://www.embedded.rwth-aachen.de/lib/exe/fetch.php?media=bib:bbk10.pdf
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Magdeburg, Denkfabrik im Wissenschaftshafen / ifak, Institut
f{"u}r Automation und Kommunikation e.V., Magdeburg;
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year = { 2010 },
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    editor = { Bollue, Kai and G{"u}ckel, Dominique and Loup, Ulrich
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[BK10]

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@inproceedings { BK10,
  author = { Brauer, J{\o}rg and King, Andy },
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  Radhia Cousot; Matthieu Martel (eds.) },
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[BKK+10]

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url = { http://dl.acm.org/citation.cfm?id=1929004&picked=prox },
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[BKK10]

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international workshop, FMICS 2010, Antwerp, Belgium,
September 20 - 21, 2010 ; proceedings / Stefan Kowalewski;
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15.
international workshop, Antwerp (Belgium), 2010-09-20 -
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  url = { http://publications.rwth-aachen.de/record/119141 },
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@inproceedings { BNS10,
  author = { Brauer, J{"o}rg and Noll, Thomas and Schlich, Bastian },
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Bibtex entry :

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@inproceedings { BPD+10,
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booktitle = { PLEASE '10 : Proceedings of the 2010 ICSE Workshop on
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pages = { 24-31 },
year = { 2010 },
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Software
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doi = { 10.1145/1808937.1808941 },
typ = { PUB:(DE-HGF)8 },
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}

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[BPK10]

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        - 05.02.2010 / Holger Giese ... [Hrsg.] },
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Entwicklung
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https://www.tu-braunschweig.de/Medien-DB/isf/mbees2010_tagungsband.pdf
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[CBD+10]

[PDFBIB](#)

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  author = { Chávez Grunewald, Martin Guillermo and Ben Makhlof,
            Ibtissem and Diab, Hilal and Abel, Dirk and Kowalewski,
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  title = { On the Effects of Network Delays on an Energy-based
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  booktitle = { NecSys'10 : 2nd IFAC Workshop on Distributed
                Estimation and
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}
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[CBD+10a]

[PDFBIB](#)

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Bibtex entry :

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@inproceedings { CBD+10a,
  author = { Chávez Grunewald, Martin Guillermo and Ben Makhoulf,
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  title = { Regelung und Sicherheitsanalyse einer Gruppe
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  publisher = { Oldenbourg },
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}
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[DCB+10]

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A testing platform for cooperative vehicle platoon controllers

Bibtex entry :

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  author = { Diab, Hilal and Chávez Grunewald, Martin Guillermo and
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      Makhoulf, Ibtissem and Abel, Dirk and Kowalewski, Stefan },
  title = { A testing platform for cooperative vehicle platoon
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  booktitle = { 13th International IEEE Conference on Intelligent
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  organization = { 13. International IEEE Conference on Intelligent
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    url = { http://publications.rwth-aachen.de/record/118439 },
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[FK10]

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    Bonn-Aachen International Center for Information Technology
    in Bonn / Gesellschaft für Informatik (Hrsg.). [Red.:
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[GBK10]

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  author = { G{"u"}ckel, Dominique and Brauer, J{"o"}rg and
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  title = { A System for Synthesizing Abstraction-Enabled Simulators
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  booktitle = { 2010 International Symposium on Industrial Embedded
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Information
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  author = { Kopp, R{"u}dger and Leonhardt, Steffen and Kowalewski,  
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  title = { Extracorporeal Membrane Oxygenation for Cardiac and  
    Pulmonary Indications: Improving Patient Safety },  
  journal = { Yearbook of intensive care and emergency medicine },  
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[Klu09]

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@phdthesis { Klu09,  
  author = { Kl{"u}nder, Daniel },  
  othercontributors = { Kowalewski, Stefan },  
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    Zustandsmaschinen und business object notation },  
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pages = { X, 131 S. : graph. Darst. },
series = { Aachener Informatik-Berichte },
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http://publications.rwth-aachen.de/record/51797/files/Kluender\_Daniel.pdf
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  publisher = { Springer },
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3-540-41865-8 },
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  author = { Kopp, R{"u}dger and Walter, Marian and Arens, Jutta and
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    zur Lungenunterst{"u}tzung },
  journal = { Biomedizinische Technik = Biomedical engineering },
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title = { Testing in the Industrial Development Process for
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booktitle = { Doctoral Symposium on Systems Software Verification
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Proceedings },
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series = { Aachener Informatik-Berichte : AIB },
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organization = { Doctoral Symposium on Systems Software
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},
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publisher = { IEEE },
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Bibtex entry :

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@inproceedings { RHS+09,
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Bibtex entry :

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  author = { Schlich, Bastian and Brauer, J{"o}rg and Wernerus,
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Systems,
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organization = { Workshop on Embedded Systems Education, Grenoble
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author = { Schlich, Bastian and Kowalewski, Stefan },
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pages = { 187-202 },
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[SWW+09]

[PDFBIB](#)

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    author = { Stollenwerk, André and Walter, Marian and Wartzek,
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ticle=B21049FA-B9E6-4AF6-96BC-F3AAEB904F59 },
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[SZR+09]

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[TBG+09]

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@article { TBG+09,
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        and Quirós, Gustavo and Slaats, Michaela and Ummels,
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[WLK+09]

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    author = { Walter, Marian and Leonhardt, Steffen and Kopp,
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[WWS+09]

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[ASK08]

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[ASK08a]

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[BKK+08]

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[BSS+08]

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[DHH+08]

[PDFBIB](#)

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    AUTOREG
    2008 ; 4. Fachtagung Baden-Baden, 12. und 13. Februar 2008 /
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[DHS+08]

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[HSW+08]

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[KKK08]

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  booktitle = { Entwurf komplexer Automatisierungssysteme, EKA 2008 :
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    April 2008 Fachtagung, Magdeburg, Denkfabrik im
    Wissenschaftshafen / Ifak, Institut für Automation und
    Kommunikation e.V., Magdeburg ... Hrsg.: Ulrich Jumar;
    Eckehard Schneider; Christian Diedrich },
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[KLK08]

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  author = { Kl{\\"u}nder, Daniel and Li, J. and Kowalewski, Stefan },
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[Klu08]

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http://subs.emis.de/LNI/Proceedings/Proceedings127/gi-proc-127-017.pdf
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[MHR+08]

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  author = { Noll, Thomas and Schlich, Bastian },  
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  series = { Lecture notes in computer science },  
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  author = { Salewski, Falk },
  othercontributors = { Kowalewski, Stefan },
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  publisher = { Publikationsserver der RWTH Aachen University },
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  author = { Schlich, Bastian },
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  author = { Schmitz, Dominik and Drews, Peter and He{\ss}eler,
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@inproceedings { SK08,  
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author = { Salewski, Falk and Kowalewski, Stefan },
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journal = { IEEE transactions on industrial informatics },
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[SLK08]

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  booktitle = { Formal methods for industrial critical systems : 12th
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[ST08]

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author = { Wilking, Dirk },
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pages = { XIV, 157 S. : graph. Darst. },
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  publisher = { Springer },
  pages = { 157-168 },
  series = { Lecture notes in computer science },
  year = { 2008 },
  address = { Berlin [u.a.] },
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  journal = { Automatisierungstechnik : at },
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  booktitle = { Moderne Elektronik im Kraftfahrzeug II : Systeme von
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    - technische Innovationen und Entwicklungstrends ; und 19
    Tabellen / Hrsg.: Bernard B{"a"}ker },
  publisher = { expert Verl. },
  volume = { 82 },
  series = { Haus der Technik - Fachbuchreihe },
  year = { 2007 },
  address = { Renningen },
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[KK07]

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  author = { Salewski, Falk and Kowalewski, Stefan },  
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empirical  
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  booktitle = { Computer safety, reliability, and security : 26th  
International Conference, SAFECOMP 2007, Nuremberg, Germany,  
September 18-21, 2007 ; proceedings / Francesca Saglietti ;  
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  pages = { 270-275 },  
  volume = { 4680 },  
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  year = { 2007 },  
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@inproceedings { BCK+05,  
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Stefan  
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  im Kraftfahrzeug' vom Haus der Technik Essen e.V. in
  M{"u}nchen] / Bernard B{"a}ker (Hrsg.) u. 43 Mitautoren :
  2005.06.14-15. Electronics in Vehicles Conference ; 25
  (M{"u}nchen) : 2005.06.14-15 },
publisher = { Expert-Verl. },
series = { Haus der Technik Fachbuch },
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[BKC+05]

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Bollig, A., Kowalewski, S., Chevalier, W., and Florissen, G., "Architekturen für die Funktionsintegration", in *Proc. 14. Aachener Kolloquium Fahrzeug- und Motorentechnik : 04. - 06. Oktober 2005, Eurogress Aachen = 14. Aachen Colloquium Automobile and Engine Technology / [Hrsg.: VKA, Lehrstuhl für Verbrennungskraftmaschinen Aachen ...] Wiss. Leitung: Stefan Pischinger - Bd. 1. 05. Oktober 2005, Aachen, 2005, ika, pp. 551-562.*

Architekturen für die Funktionsintegration

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    Automobile and Engine Technology / [Hrsg.: VKA, Lehrstuhl
    f{"u}r Verbrennungskraftmaschinen Aachen ...] Wiss.
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[LKT05]

[PDFBIB](#)

Lyons, M. J., Klünder, D., and Tetsutani, N., "Supporting empathy in online learning with artificial expressions", *Educational technology & society*, vol. 8, iss. 4, pp. 22-30, 2005

Supporting empathy in online learning with artificial expressions

Bibtex entry :

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@article { LKT05,
  author = { Lyons, Michael J. and Kl{"u"}nder, Daniel and Tetsutani,
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[SK05]

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@inproceedings { SK05,
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Deutschland Tagung 2005, 13. und 14. Oktober 2005,
Rheinische-Westf{"a}lische Technische Hochschule Aachen /
Veranst.: Gesellschaft f{"u}r Informatik, Fachgruppe Ada
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[SK05a]

[PDFBIB](#)

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Bibtex entry :

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http://pi.informatik.uni-siegen.de/stt/25_4/01_Fachgruppenberichte/Ada/
03_Salewski_Kowalewski.pdf },
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[SK05b]

[PDFBIB](#)

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  author = { Schlich, Bastian and Kowalewski, Stefan },
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Formal
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; proceedings of a workshop held at the Loyola College
Graduate Center, Columbia, Maryland, USA, 23 - 24 September
2005 ; with a special track on the theme of formal methods
in human and robotic space exploration / National
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  pages = { 65-77 },
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[SWK05]

[PDFBIB](#)

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@article { SWK05,  
  author = { Salewski, Falk and Wilking, Dirk and Kowalewski, Stefan  
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  url = { http://publications.rwth-aachen.de/record/160045 },  
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[WK05]

[PDFBIB](#)

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  author = { Wilking, Dirk and Kowalewski, Stefan },  
  title = { Agile methods for embedded systems },  
  booktitle = { Extreme programming and agile processes in software  
engineering : 6th international conference, XP 2005,  
Sheffield, UK, June 18 - 23, 2005 ; proceedings / Hubert  
Baumeister ... (ed.) },  
  publisher = { Springer },  
  pages = { 319-320 },  
  volume = { 3556 },  
  series = { Lecture notes in computer science },  
  year = { 2005 },  
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[PDFBIB](#)

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@inproceedings { WR05,
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  url = { http://publications.rwth-aachen.de/record/127542 },
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[SK04]

[PDFBIB](#)

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@techreport { SK04,
  author = { Schlich, Bastian and Kowalewski, Stefan },
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[SG94]

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Stability aspects for hollow section columns, beams and beam-columns

Bibtex entry :

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@inproceedings { SG94,
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      16 December 1994 / ed. by Paul Grundy ... },
  publisher = { Balkema },
  pages = { 151-158 },
  year = { 1994 },
  address = { Rotterdam [u.a.] },
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    Melbourne
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