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Kontakt

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Fachausschüsse

- GMA Fachausschuss 7.25 - "Testen vernetzter Systeme in Industrie 4.0" (seit 2015)

Patente

- Method and Device for Testing a Software Progam (EP000003306295A1, US020180101472A1, CN000107918585A)
- Method and Device for Assessing Signals (DE102017217835A1, US020180101503A1, CN000107918691A)

Abschlussarbeiten

Bei Interesse bitte ich um Kontaktaufnahme per E-Mail oder persönlich bei mir im Büro.

Laufend

Abgeschlossen

- Automated Test Case Generation for Reactive Systems from a Controlled Natural Language
- Evaluation of the SysReq Controlled Natural Language for the Generation of Functional Test Cases
- Simulation-free Evaluation of Existing Data in Arttest
- Grafisch änderbare visuelle Testfallspezifikation in Arttest
- Entwicklung eines Plattformadapters zur Unterstützung zusätzlicher Simulationsumgebungen in Arttest
- Entwicklung eines Frameworks zur performanten Visualisierung von Signalen und Akzeptanzbereich für Arttest
- Entwicklung einer Widget-basierten Oberfläche zur Steueruung von Simulink Modellen in Arttest

Lehre

Semester	Titel	Art
Wintersemester 18/19	Einführung in die Technische Informatik	V
	Modellbasiertes Testen & Analyse eingebetteter Software	S
Sommersemester 18	Modellbasiertes Testen & Analyse eingebetteter Software	S
Wintersemester 17/18	Einführung in die Technische Informatik	V
	Modellbasiertes Testen & Analyse eingebetteter Software	S
Sommersemester 17	Modellbasiertes Testen & Analyse eingebetteter Software	S
Wintersemester 16/17	Einführung in die Technische Informatik	V
	Modellbasiertes Testen & Analyse eingebetteter Software	S
Sommersemester 16	Modellbasiertes Testen & Analyse eingebetteter Software	S
Wintersemester 15/16	Einführung in die Technische Informatik	V
	Modellbasiertes Testen & Analyse eingebetteter Software	S

Sprechstunde

Nach Vereinbarung.

Publikationen

[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,
    author = { Kugler, Christopher },
    othercontributors = { Kowalewski, Stefan and Pischinger, Stefan },
    title = { Systematic derivation of feature-driven and risk-based
test
        strategies for automotive applications },
    publisher = { RWTH Aachen University },
    school = { RWTH Aachen University },
    pages = { 1 Online-Ressource : Illustrationen, Diagramme },
    series = { Aachener Informatik-Berichte (AIB) },
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    doi = { 10.18154/RWTH-2023-05715 },
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    reportid = { RWTH-2023-05715 },
    cin = { 122810 / 120000 },
    url = {
http://publications.rwth-aachen.de/record/959607/files/959607.pdf },
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[BFH+18]
PDFBIB

Bordasch, M., Facchi, C., Heidepriem, S., Jähnert, J., Jung, T., Köllner, C., Kraas, A., Krause, J., Krüning, K., Kugler, A., Maschler, B., Schleicher, C., Siegrist, D., Simon, H., Störmer, C., Thönnessen, D., Wassermann, E., Weyrich, M., Wimmer, T., and Zeller, A., "VDI Status Report Testing of Networked Systems for Industrie 4.0", 2018.

VDI Status Report Testing of Networked Systems for Industrie 4.0

Bibtex entry :

```
@techreport {  BFH+18,
    author = { Bordasch, Manuel and Facchi, Christian and Heidepriem,
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        and Kr{\"u}ning, Kai and Kugler, Alexander and Maschler,
        Benjamin and Schleicher, Christian and Siegrist, Daniel and
        Simon, Hendrik and St{\"o}rmer, Christoph and
        Th{\"o}nnessen, David and Wassermann, Erik and Weyrich,
        Michael and Wimmer, Thomas and Zeller, Andreas },
    title = { VDI Status Report Testing of Networked Systems for
Industrie
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https://www.vdi.de/ueber-uns/presse/publikationen/details?tx_vdipublica
tions_publicationdetails%5Bpublication%5D=19&cHash=e6b4c230eafa31d95ceb
75395274c78c },
}
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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

Systems engineering with SysML : The path to the future?

Bibtex entry :

```
@article {  KRG+18,
    author = { Kriebel, Stefan and Richenhagen, Johannes Martin and
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    publisher = { Springer Fachmedien },
    pages = { 44-47 },
    volume = { 79 },
    number = { 5 },
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    url = { http://publications.rwth-aachen.de/record/731737 },
}
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[KRG+18a]
PDFBIB

Kriebel, S., Richenhagen, J. M., Granrath, C., and Kugler, C., "Systems Engineering mit SysML : Der Weg in die Zukunft?", *Motortechnische Zeitschrift : MTZ*, vol. 79, iss. 5, pp. 48-53, 2018

Systems Engineering mit SysML : Der Weg in die Zukunft?

Bibtex entry :

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@article {  KRG+18a,
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    title = { Systems Engineering mit SysML : Der Weg in die Zukunft?
},
    journal = { Motortechnische Zeitschrift : MTZ },
    publisher = { Springer Fachmedien },
    pages = { 48-53 },
    volume = { 79 },
    number = { 5 },
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    doi = { 10.1007/s35146-018-0025-7 },
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    url = { http://publications.rwth-aachen.de/record/731745 },
}
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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.

Model-in-the-Loop and Software-in-the-Loop Testing of Closed-Loop Automotive Software with Arttest

Bibtex entry :

```
@inproceedings {  HWK+17,
    author = { Hansen, Norman and Wiechowski, Norbert and Kugler,
Alexander
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    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.) },
    publisher = { Gesellschaft f{\"u}r Informatik },
    pages = { 1537-1549 },
    series = { GI-Edition : lecture notes in informatics. Proceedings
},
    year = { 2017 },
    address = { Bonn },
    organization = { 47. Jahrestagung der Gesellschaft f{\"u}r
Informatik e.V.
        (GI), Chemnitz (Germany), 2017-09-25 - 2017-09-29 },
    doi = { 10.18420/in2017_154 },
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[KKR+17]
PDFBIB

Kugler, C., Kowalewski, S., Richenhagen, J. M., Maquet, R., and Schloßer, A., "Metrics-based strategies for quality assurance of automotive embedded software", in *Proc. 17. Internationales Stuttgarter Symposium : Automobil- und Motorentechnik / herausgegeben von Michael Bargende, Hans-Christian Reuss, Jochen Wiedemann. - Band 2*, Wiesbaden ; [Heidelberg], 2017 in Proceedings, Springer Vieweg,, pp. 711-730.

Metrics-based strategies for quality assurance of automotive embedded software

Bibtex entry :

```
@inproceedings {  KKR+17,
    author = { Kugler, Christopher and Kowalewski, Stefan and
Richenhagen,
        Johannes Martin and Maquet, Ralf and Schlo{\ss}er, Axel },
    title = { Metrics-based strategies for quality assurance of
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    booktitle = { 17. Internationales Stuttgarter Symposium :
Automobil- und
        Motorentechnik / herausgegeben von Michael Bargende,
        Hans-Christian Reuss, Jochen Wiedemann. - Band 2 },
    publisher = { Springer Vieweg, },
    pages = { 711-730 },
    series = { Proceedings },
    year = { 2017 },
    address = { Wiesbaden ; [Heidelberg] },
    organization = { 17. Stuttgart International Symposium Automotive
and Engine
        Technology = 17. Internationales Stuttgarter Symposium
        Automobil- und Motorentechnik, Stuttgart (Germany),
        2017-03-14 - 2017-03-15 },
    doi = { 10.1007/978-3-658-16988-6_56 },
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    url = { http://publications.rwth-aachen.de/record/752278 },
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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 :

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@inproceedings {  NKM+17,
    author = { Nowack, Jan and Kugler, Christopher and Maquet, Ralf and
        Richenhagen, Johannes Martin and Remelhe, Filipe },
    title = { Continuous process for the validation of transmission
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    year = { 2017 },
    organization = { 16. CTI Symposium },
    typ = { PUB:(DE-HGF)1 },
    reportid = { RWTH-CONV-236303 },
    url = {
https://drivetrain-symposium.world/cn/continuous-process-validation-tra
nsmission-controls/ },
}
```

[WRB+17]
PDFBIB

Wiechowski, N., Rambow, T., Busch, R., Kugler, A., Hansen, N., and Kowalewski, S., "Arttest - a New Test Environment for Model-Based Software Development", *SAE technical paper*, vol. 2017-01-0004, 2017

Arttest - a New Test Environment for Model-Based Software Development

Bibtex entry :

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@article {  WRB+17,
    author = { Wiechowski, Norbert and Rambow, Thomas and Busch, Rainer
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    journal = { SAE technical paper },
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    volume = { 2017-01-0004 },
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    issn = { 2688-3627 },
    organization = { SAE World Congress Experience, Detroit, MI (USA),
2017-04-04
        - 2017-04-06 },
    doi = { 10.4271/2017-01-0004 },
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    url = { http://publications.rwth-aachen.de/record/752280 },
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Anmerkung: [KKR+17] und [NKM+17] sind keine Veröffentlichungen von mir. Diese Einträge werden leider angezeigt, weil es mittels des Bibtex Plugin von DokuWiki nicht möglich ist, gleichzeitig nach Vor- und Nachnamen zu filtern.