

Dr.-Ing. Alexandru Kampmann

Member of the [Cyber-physical Mobility Group](#)

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Birth name: Gurghian

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Office: 2314

About

I am a member of the [Cyber-physical Mobility Group](#). I am researching automotive-grade service-oriented software architectures in the context of the [UNICARagil](#) project.

Bachelor/Master Thesis

If you are interested in a Bachelor's or Master's thesis, please contact me by e-mail. Your own suggestions are also possible.

Open HiWi/WiHi Positions

Current vacancies can be found [here](#). Unsolicited applications are also welcome. Applications should include a grade overview and a short CV.

Patents

- [Methods and systems for opening of a vehicle access point using audio or video data associated with a user](#)
- [Passenger tracking systems and methods](#)
- [Inductive loop detection systems and methods](#)
- [Pedestrian detection when a vehicle is reversing](#)
- [Sinkhole detection systems and methods](#)
- [Detecting hazards in anticipation of opening vehicle doors](#)
- [Rear camera stub detection](#)
- [Accident attenuation systems and methods](#)
- [Lane detection systems and methods](#)
- [Vehicle localization using cameras](#)

Publications

[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 :

```
@article { GRB+24,  
  author = { Goldermann, Lavinia and Rakel, Stefan and Buglowski,  
    Mateusz  
      and Mokhtarian, Armin and Kampmann, Alexandru and Jan{\ss},  
      Armin and Yilmaz, Okan and Beger, Frank and Walter, Marian  
      and Leonhardt, Steffen and Kowalewski, Stefan and  
      Stollenwerk, André },  
  title = { Designing the user interface of a ventilator under the  
    constraints of a pandemic },  
  journal = { Automatisierungstechnik },  
  publisher = { De Gruyter },  
  pages = { 484-495 },  
  volume = { 72 },  
  number = { 5 },  
  year = { 2024 },  
  address = { Berlin },
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issn = { 0178-2312 },
doi = { 10.1515/auto-2023-0205 },
typ = { PUB:(DE-HGF)16 },
reportid = { RWTH-2024-04857 },
cin = { 122810 / 611010 / 419410 / 120000 },
}

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[BMA+23]

[PDFBIB](#)

Böhlen, B., Meyer, O., Alrifaae, 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 :

```

@inproceedings { BMA+23,
  author = { B{"o"}hlen, Boris and Meyer, Oliver and Alrifaae, Bassam
and
  Beerwerth, Julius and Kampmann, Alexandru and Kowalewski,
Stefan and Konersmann, Marco and Rumpe, Bernhard and
Steinfurth, Felix },
  title = { Software-Defined Vehicle – Herausforderungen in der
Diagnose dienstorientierter Fahrzeugarchitekturen },
  booktitle = { Diagnose in mechatronischen Fahrzeugsystemen XVI :
Software-Defined Vehicle, SOVD, Maschinelles Lernen und KI,
Standardisierung, HU und ADAS / Prof. Dr. Bernard B{"a"}ker,
Dipl.-Ing. Andreas Unger (Hrsg.) und 53 Mitautoren },
  publisher = { TUDpress },
  pages = { 17-28 },
  year = { 2023 },
  address = { Dresden },
  organization = { 16. Tagung Diagnose in mechatronischen
Fahrzeugsystemen,
Dresden (Germany), 2023-05-23 - 2023-05-24 },
  typ = { PUB:(DE-HGF)7 },
  reportid = { RWTH-2023-10164 },
  cin = { 122810 / 121510 / 120000 },
  url = {
http://publications.rwth-aachen.de/record/972417/files/972417.pdf },
  illkey = { BMBF 01IS22088A - Verbundprojekt MANNHEIM-AUT0tech.agil:
Architektur und Technologien zur Orchestrierung
automobiltechnischer Agilit{"a"}t (01IS22088A) },
}

```

[Kam23]

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

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 },  
  othercontributors = { Kowalewski, Stefan and Eckstein, Lutz },  
  title = { A dynamic service-oriented software architecture for the  
    automotive domain },  
  publisher = { RWTH Aachen University },  
  school = { RWTH Aachen University },  
  pages = { 1 Online-Ressource : Illustrationen },  
  series = { Aachener Informatik-Berichte (AIB) },  
  year = { 2023 },  
  address = { Aachen },  
  doi = { 10.18154/RWTH-2024-00864 },  
  typ = { PUB:(DE-HGF)11 },  
  reportid = { RWTH-2024-00864 },  
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 }
```

[KLK+22]

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

Kampmann, A., Lüer, M., Kowalewski, S., and Alrifaaee, 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 :

```
@inproceedings { KLK+22,  
  author = { Kampmann, Alexandru and L{"u}er, Maximilian and  
    Kowalewski,  
      Stefan and Alrifaaee, Bassam },  
  title = { Optimization-based Resource Allocation for an Automotive  
    Service-oriented Software Architecture },  
  booktitle = { 2022 IEEE Intelligent Vehicles Symposium (IV) : 4-9  
    June
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    2022 / publisher: IEEE },
    publisher = { IEEE },
    pages = { 678-687 },
    year = { 2022 },
    address = { Piscataway, NJ },
    organization = { 33. IEEE Intelligent Vehicles Symposium, Aachen
(Germany),
    2022-06-04 - 2022-06-09 },
    doi = { 10.1109/IV51971.2022.9827429 },
    typ = { PUB:(DE-HGF)7 },
    reportid = { RWTH-2022-08619 },
    cin = { 122810 / 120000 },
    url = {
http://publications.rwth-aachen.de/record/853127/files/853127.pdf },
}

```

[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.

Investigating Outdoor Recognition Performance of Infrared Beacons for Infrastructure-based Localization

Bibtex entry :

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@inproceedings { KLP+22,
    author = { Kampmann, Alexandru and Lamberti, Michael and Petrovic,
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    title = { Investigating Outdoor Recognition Performance of Infrared
    Beacons for Infrastructure-based Localization },
    booktitle = { 2022 IEEE Intelligent Vehicles Symposium (IV) : 4-9
June
    2022 / publisher: IEEE },
    publisher = { IEEE },
    pages = { 1107-1113 },
    year = { 2022 },
    address = { Piscataway, NJ },
    organization = { 33. IEEE Intelligent Vehicles Symposium, Aachen
(Germany),
    2022-06-04 - 2022-06-09 },
    doi = { 10.1109/IV51971.2022.9827288 },
    typ = { PUB:(DE-HGF)7 },
    reportid = { RWTH-2022-08618 },
    cin = { 122810 / 120000 },
    url = {
http://publications.rwth-aachen.de/record/853126/files/853126.pdf },
}

```

[KMK+22]

[PDFBIB](#)

Kampmann, A., Mokhtarian, A., Kowalewski, S., and Alrifaae, 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 :

```
@inproceedings { KMK+22,  
  author = { Kampmann, Alexandru and Mokhtarian, Armin and  
    Kowalewski,  
      Stefan and Alrifaae, Bassam },  
  title = { ASOA - A Dynamic Software Architecture for Software-  
defined  
    Vehicles },  
  booktitle = { [31st Aachen Colloquium Sustainable Mobility 2022] },  
  year = { 2022 },  
  organization = { 31. Aachen Colloquium Sustainable Mobility 2022 },  
  typ = { PUB:(DE-HGF)8 },  
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http://publications.rwth-aachen.de/record/856836/files/856836.pdf },  
}
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[JSG+21]

[PDFBIB](#)

Jatzkowski, I., Stolte, T., Graubohm, R., Maurer, M., Kampmann, A., Alrifaae, 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 :

```
@inproceedings { JSG+21,  
  author = { Jatzkowski, Inga and Stolte, Torben and Graubohm, Robert
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and

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Maurer, Markus and Kampmann, Alexandru and Alrifaae, Bassam
and Kowalewski, Stefan and Buchholz, Michael and Dietmayer,
Klaus },
title = { Integration of a Vehicle Operating Mode Management into
UNICARagil's Automotive Service-oriented Software
Architecture },
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
Combustion Engines (RWTH Aachen University) },
publisher = { Institute for Automotive Engineering, RWTH Aachen
University },
pages = { 595-614 },
year = { 2021 },
address = { Aachen },
organization = { 30. Aachen Colloquium Sustainable Mobility, Aachen
(Germany), 2021-10-04 - 2021-10-06 },
doi = { 10.24355/DBBS.084-202110271613-0 },
typ = { PUB:(DE-HGF)7 },
reportid = { RWTH-2022-01307 },
cin = { 122810 / 120000 },
url = {
http://publications.rwth-aachen.de/record/840892/files/840892.pdf },
}

```

[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,
  author = { Kloock, Maximilian Martin and Scheffe, Patrick and
Maczijewski, Janis and Kampmann, Alexandru and Mokhtarian,
Armin and Kowalewski, Stefan and Alrifaae, Bassam },
  title = { Cyber-Physical Mobility Lab : An Open-Source Platform for
Networked and Autonomous Vehicles },
  booktitle = { 2021 European Control Conference (ECC) },
  publisher = { IEEE },
  pages = { 1937-1944 },
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year = { 2021 },
address = { [Piscataway, NJ] },
organization = { 2021 European Control Conference, online,
2021-06-29 -
2021-07-02 },
doi = { 10.23919/ECC54610.2021.9654986 },
typ = { PUB:(DE-HGF)7 },
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cin = { 122810 / 120000 },
url = { http://publications.rwth-aachen.de/record/838069 },
}
```

[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

A Cloud Architecture for Networked and Autonomous Vehicles

Bibtex entry :

```
@article { MKL+21,
  author = { Mokhtarian, Armin and Kampmann, Alexandru and L{"u}er,
    Maximilian and Kowalewski, Stefan and Alrifaae, Bassam },
  title = { A Cloud Architecture for Networked and Autonomous
Vehicles },
  journal = { IFAC-PapersOnLine },
  publisher = { Elsevier },
  pages = { 233-239 },
  volume = { 54 },
  number = { 2 },
  year = { 2021 },
  address = { Frankfurt },
  issn = { 2405-8963 },
  organization = { 16. IFAC Symposium on Control in Transportation
Systems,
    online, 2021-06-08 - 2021-06-10 },
  doi = { 10.1016/j.ifacol.2021.06.028 },
  typ = { PUB:(DE-HGF)16 },
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  cin = { 122810 / 120000 },
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http://publications.rwth-aachen.de/record/828696/files/828696.pdf },
}
```

[KMR+20]

[PDFBIB](#)

Kampmann, A., Mokhtarian, A., Rogalski, J., Kowalewski, S., and Alrifaae, B., "Agile Latency Estimation for a Real-time Service-oriented Software Architecture", *IFAC-PapersOnLine*, vol. 53,

iss. 2, pp. 5795-5800, 2020

Agile Latency Estimation for a Real-time Service-oriented Software Architecture

Bibtex entry :

```
@article { KMR+20,
  author = { Kampmann, Alexandru and Mokhtarian, Armin and Rogalski, Jan
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  publisher = { Elsevier },
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  volume = { 53 },
  number = { 2 },
  year = { 2020 },
  address = { Frankfurt ; M{"u"}nchen [u.a.] },
  issn = { 2405-8963 },
  organization = { 21. IFAC World Congress on Automatic Control - Meeting
                  Societal Challenges, Berlin (Germany), 2020-07-11 - 2020-07-17 },
  doi = { 10.1016/j.ifacol.2020.12.1619 },
  typ = { PUB:(DE-HGF)16 },
  reportid = { RWTH-2021-06497 },
  cin = { 122810 / 120000 },
  url = {
http://publications.rwth-aachen.de/record/822016/files/822016.pdf },
}
```

[LvW+20]

[PDFBIB](#)

Lampe, B., van Kempen, R., Woopen, T., Kampmann, A., Alrifaae, 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.

Reducing Uncertainty by Fusing Dynamic Occupancy Grid Maps in a Cloud-based Collective Environment Model

Bibtex entry :

```
@inproceedings { LvW+20,
  author = { Lampe, Bastian and van Kempen, Raphael and Woopen, Timo
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Kampmann, Alexandru and Alrifaae, Bassam and Eckstein, Lutz },
title = { Reducing Uncertainty by Fusing Dynamic Occupancy Grid
Maps
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booktitle = { 2020 IEEE Intelligent Vehicles Symposium (IV) /
publisher:
IEEE },
publisher = { IEEE },
pages = { 837-843 },
year = { 2020 },
address = { Piscataway, NJ },
organization = { 31. IEEE Intelligent Vehicles Symposium, online,
2020-10-19
- 2020-11-13 },
doi = { 10.1109/IV47402.2020.9304816 },
typ = { PUB:(DE-HGF)7 },
reportid = { RWTH-2021-02777 },
cin = { 414110 / 122810 / 120000 },
url = { http://publications.rwth-aachen.de/record/815706 },
}
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[LvW+20a]

[PDF](#)BIB

Lampe, B., van Kempen, R., Woopen, T., Kampmann, A., Alrifaae, B., and Eckstein, L., "Reducing Uncertainty by Fusing Dynamic Occupancy Grid Maps in a Cloud-based Collective Environment Model", , p. 7, 2020

Reducing Uncertainty by Fusing Dynamic Occupancy Grid Maps in a Cloud-based Collective Environment Model

Bibtex entry :

```
@article { LvW+20a,
author = { Lampe, Bastian and van Kempen, Raphael and Woopen, Timo
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Maps
in a Cloud-based Collective Environment Model },
pages = { 7 Seiten },
year = { 2020 },
typ = { PUB:(DE-HGF)25 },
reportid = { RWTH-2021-04037 },
cin = { 414110 / 122810 / 120000 },
url = {
http://publications.rwth-aachen.de/record/817686/files/817686.pdf },
}
```

[MKA+20]

PDFBIB

Mokhtarian, A., Kampmann, A., Alrifaae, B., Kowalewski, S., Lampe, B., and Eckstein, L., "Agile Requirement Engineering for a Cloud System for Automated and Networked Vehicles", in *Proc. 2nd International Workshop on Autonomous Systems Design : ASD 2020, March 13, 2020, Grenoble, France, converted to a virtual event due to COVID-19, held in April 2020 / edited by Sebastian Steinhorst, Jyotirmoy V. Deshmukh*, Saarbrücken/Wadern, Germany, 2020 in OpenAccess Series in Informatics, Schloss Dagstuhl - Leibniz-Zentrum für Informatik GmbH, Dagstuhl Publishing, August, p. 4:1-4:8.

Agile Requirement Engineering for a Cloud System for Automated and Networked Vehicles

Bibtex entry :

```
@inproceedings { MKA+20,
  author = { Mokhtarian, Armin and Kampmann, Alexandru and Alrifaae,
    Bassam and Kowalewski, Stefan and Lampe, Bastian and
    Eckstein, Lutz },
  title = { Agile Requirement Engineering for a Cloud System for
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  booktitle = { 2nd International Workshop on Autonomous Systems
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      ASD 2020, March 13, 2020, Grenoble, France, converted to a
      virtual event due to COVID-19, held in April 2020 / edited
      by Sebastian Steinhorst, Jyotirmoy V. Deshmukh },
  publisher = { Schloss Dagstuhl - Leibniz-Zentrum für Informatik
    GmbH,
      Dagstuhl Publishing, August },
  pages = { 4:1-4:8 },
  series = { OpenAccess Series in Informatics },
  year = { 2020 },
  address = { Saarbrücken/Wadern, Germany },
  organization = { 2. International Workshop on Autonomous Systems
    Design,
      Grenoble (France), 2020-03-12 - 2020-03-13 },
  doi = { 10.4230/OASICS.ASD.2020.4 },
  typ = { PUB:(DE-HGF)7 },
  reportid = { RWTH-2020-08417 },
  cin = { 122810 / 120000 / 414110 },
}
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[MKA+20a]

PDFBIB

Mokhtarian, A., Kampmann, A., Alrifaae, B., and Kowalewski, S., "The Dynamic Service-oriented Software Architecture for the UNICARagil Project", in *Proc. 29. Aachen Colloquium Sustainable Mobility : October 5th-7th, 2020, digital event / 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. - 1: October 6th,*

2020, Aachen, 2020, Institute for Automotive Engineering, RWTH Aachen University ; Aachen : Institute for Combustion Engines, RWTH Aachen University, pp. 275-284.

The Dynamic Service-oriented Software Architecture for the UNICARagil Project

Bibtex entry :

```
@inproceedings { MKA+20a,  
  author = { Mokhtarian, Armin and Kampmann, Alexandru and Alrifaae,  
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  title = { The Dynamic Service-oriented Software Architecture for  
the  
    UNICARagil Project },  
  booktitle = { 29. Aachen Colloquium Sustainable Mobility : October  
    5th-7th, 2020, digital event / 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 Combustion Engines, RWTH Aachen  
    University. - 1: October 6th, 2020 },  
  publisher = { Institute for Automotive Engineering, RWTH Aachen  
University  
    ; Aachen : Institute for Combustion Engines, RWTH Aachen  
    University },  
  pages = { 275-284 },  
  year = { 2020 },  
  address = { Aachen },  
  organization = { 29. Aachen Colloquium Sustainable Mobility = 29.  
Aachener  
    Kolloquium Fahrzeug- und Motorentechnik, Aachen (Germany),  
    2020-10-05 - 2020-10-07 },  
  doi = { 10.18154/RWTH-2020-11256 },  
  typ = { PUB:(DE-HGF)7 },  
  reportid = { RWTH-2020-11256 },  
  cin = { 122810 / 120000 },  
  url = {  
http://publications.rwth-aachen.de/record/807282/files/807282.pdf },  
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[SMK+20]

PDFBIB

Scheffe, P., Maczijewski, J., Kloock, M. M., Kampmann, A., Derks, A., Kowalewski, S., and Alrifaae, B., "Networked and Autonomous Model-scale Vehicles for Experiments in Research and Education", *IFAC-PapersOnLine*, vol. 53, iss. 2, pp. 17332-17337, 2020

Networked and Autonomous Model-scale Vehicles for Experiments in Research and Education

Bibtex entry :

```
@article { SMK+20,
  author = { Scheffe, Patrick and Maczijewski, Janis and Kloock,
    Maximilian Martin and Kampmann, Alexandru and Derks, Andreas
    and Kowalewski, Stefan and Alrifaae, Bassam },
  title = { Networked and Autonomous Model-scale Vehicles for
    Experiments in Research and Education },
  journal = { IFAC-PapersOnLine },
  publisher = { Elsevier },
  pages = { 17332-17337 },
  volume = { 53 },
  number = { 2 },
  year = { 2020 },
  address = { Frankfurt },
  issn = { 2405-8963 },
  organization = { 21. IFAC World Congress, online, 2020-07-11 -
    2020-07-17 },
  doi = { 10.1016/j.ifacol.2020.12.1821 },
  typ = { PUB:(DE-HGF)16 },
  reportid = { RWTH-2021-03987 },
  cin = { 122810 / 120000 },
  url = {
    http://publications.rwth-aachen.de/record/817552/files/817552.pdf },
}
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[KAK+19]

PDFBIB

Kampmann, A., Alrifaae, B., Kohout, M., Wüstenberg, A., Woopen, T., Nolte, M., Eckstein, L., and Kowalewski, S., "A Dynamic Service-Oriented Software Architecture for Highly Automated Vehicles", in *Proc. The 2019 IEEE Intelligent Transportation Systems Conference - ITSC : Auckland, New Zealand, 27-30 October 2019 / IEEE, IEEE-ITSC 2019, ITSS - IEEE Intelligent Transportation Systems Society*, Piscataway, NJ, 2019, IEEE, pp. 2101-2108.

A Dynamic Service-Oriented Software Architecture for Highly Automated Vehicles

Bibtex entry :

```
@inproceedings { KAK+19,
  author = { Kampmann, Alexandru and Alrifaae, Bassam and Kohout,
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    and W{"u"}stenberg, Andreas and Woopen, Timo and Nolte,
    Marcus and Eckstein, Lutz and Kowalewski, Stefan },
  title = { A Dynamic Service-Oriented Software Architecture for
    Highly
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Automated Vehicles },
booktitle = { The 2019 IEEE Intelligent Transportation Systems
Conference
- ITSC : Auckland, New Zealand, 27-30 October 2019 / IEEE,
IEEE-ITSC 2019, ITSS - IEEE Intelligent Transportation
Systems Society },
publisher = { IEEE },
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[KNR+19]

[PDFBIB](#)

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@inproceedings { KNR+19,
author = { Keilhoff, Dan and Niedballa, Dennis and Reuss,
Hans-Christian and Buchholz, Michael and Gies, Fabian and
Dietmayer, Klaus and Lauer, Martin and Stiller, Christoph
and Ackermann, Stefan and Winner, Hermann and Kampmann,
Alexandru and Alrifae, Bassam and Kowalewski, Stefan and
Klein, Fabian and Struth, Michael Manfred and Woopen, Timo
and Eckstein, Lutz },
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Automobil- und
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doi = { 10.1007/978-3-658-25939-6_65 },
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[KWA+19]

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[WLB+18]

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UNICARagil - Disruptive Modular Architectures for Agile, Automated Vehicle Concepts

Bibtex entry :

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@inproceedings { WLB+18,  
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and Kowalewski, Stefan and Moormann, Dieter and Stolte,  
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  
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Univ.-Prof. Dr.-Ing. Stefan Pischinger ; organizational  
management: Benedikt Hammerm{"u"}ller (M. Sc.), Dipl.-Ing.  
Rainer Wolsfeld ; organized by: Institute for Automotive  
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(RWTH Aachen) },
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[KGK17]

[PDFBIB](#)

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[KGK15]

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[KGK14]

[PDFBIB](#)

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Predictable Broadcasting of Parallel Intents in Real-Time Android

Bibtex entry :

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