

Dr.-Ing. Florian Göbe



***Research Assistant and PhD student until 11/2017.
Since 12/2017: Exist Research Transfer (BMW) [Arttest](#)***

Contact:

e-Mail: [goebe\[at\]embedded\[dot\]rwth-aachen\[dot\]de](mailto:goebe[at]embedded[dot]rwth-aachen[dot]de)
phone: +49 241 80-21171

Address: Ahornstr. 55, 52074 Aachen, Germany
Office: Room 2314 (Building H, 3rd floor)

Teaching

2017

- [Embedded Systems](#) (Lecture)

2016

- [Introduction to Embedded Systems](#) (Lecture)

2015

- [Introduction to Embedded Systems](#) (Lecture)

2014

- [Introduction to Embedded Systems](#) (Lecture)

2014

- [Introduction to Embedded Systems](#) (Lecture)
- [Synthese und Implementierung von Steuerungen für ereignisdiskrete Systeme](#) (Seminar)

Supervised Theses

- Entwicklung einer Simulations- und Debuggingumgebung für Bilderkennungsverfahren im Bereich autonomer Mobilität
- Ansteuerung von SPS-Timern und erweiterte Codegenerierung für ein Werkzeug zur Synthese von ereignisdiskreten Überwachern
- Evaluation von Synthesetools für Steuerungssoftware im Bereich der Automatisierungstechnik
- Carolo Cup 2014 (<http://galaxis.rwth-aachen.de/>)

Other Projects

- Carolo Cup 2014 (<http://galaxis.rwth-aachen.de/> - German webpage)

Publications

[Gob19]

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

Göbe, F., "Runtime supervision of PLC programs using discrete-event systems", PhD Thesis, Aachen, 2019.

Runtime supervision of PLC programs using discrete-event systems

Bibtex entry :

```
@phdthesis { Gob19,
  author = { Göbe, Florian },
  othercontributors = { Kowalewski, Stefan and Lunze, Jan },
  title = { Runtime supervision of PLC programs using discrete-event
    systems },
  publisher = { RWTH Aachen University, Department of Computer
    Science },
  school = { RWTH Aachen University },
  pages = { 1 Online-Ressource (xi, 170 Seiten) : Illustrationen,
    Diagramme },
  series = { Achener Informatik-Berichte },
  year = { 2019 },
  address = { Aachen },
  doi = { 10.18154/RWTH-2019-11022 },
  typ = { PUB:(DE-HGF)11 },
  reportid = { RWTH-2019-11022 },
  cin = { 122810 / 120000 },
```

```
url = {
http://publications.rwth-aachen.de/record/773311/files/773311.pdf },
}
```

[GAK17]

[PDFBIB](#)

Göbe, F., Aydin, S., and Kowalewski, S., "Applicability of supervisory control theory for the supervision of PLC programs", 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. 8.

Applicability of supervisory control theory for the supervision of PLC programs

Bibtex entry :

```
@inproceedings { GAK17,
  author = { G{"o}be, Florian and Aydin, Selin and Kowalewski,
Stefan },
  title = { Applicability of supervisory control theory for the
supervision of PLC programs },
  booktitle = { 2017 22nd IEEE International Conference on Emerging
Technologies and Factory Automation : September 12-15, 2017,
Limassol, Cyprus / ABB, IEEE, IES, University of Cyprus },
  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 },
  typ = { PUB:(DE-HGF)7 },
  reportid = { RWTH-2018-223454 },
  cin = { 122810 / 120000 },
  url = { http://publications.rwth-aachen.de/record/722221 },
}
```

[GNK16]

[PDFBIB](#)

Göbe, F., Ney, O., and Kowalewski, S., "Reusability and Modularity of Safety Specifications for Supervisory Control", in *Proc. 2016 IEEE 21st International Conference on Emerging Technologies and Factory Automation (ETFA) : September 6-9, 2016 Berlin, Germany / IEEE, IES, Fraunhofer IOSB-INA, InIT, Piscataway, NJ, 2016, IEEE*, pp. 1-8.

Reusability and Modularity of Safety Specifications for

Supervisory Control

Bibtex entry :

```
@inproceedings { GNK16,  
  author = { G{\\"o}be, Florian and Ney, Oliver and Kowalewski, Stefan  
},  
  title = { Reusability and Modularity of Safety Specifications for  
Supervisory Control },  
  booktitle = { 2016 IEEE 21st International Conference on Emerging  
Technologies and Factory Automation (ETFA) : September 6-9,  
2016 Berlin, Germany / IEEE, IES, Fraunhofer IOSB-INA, InIT },  
  publisher = { IEEE },  
  pages = { 1-8 },  
  year = { 2016 },  
  address = { Piscataway, NJ },  
  organization = { 21. International Conference on Emerging  
Technologies and  
Factory Automation, Berlin (Germany), 2016-09-06 -  
2016-09-09 },  
  doi = { 10.1109/ETFA.2016.7733498 },  
  typ = { PUB:(DE-HGF)7 },  
  reportid = { RWTH-2017-00123 },  
  cin = { 122810 / 120000 },  
  url = { http://publications.rwth-aachen.de/record/681312 },  
}
```

[GTN+16]

PDFBIB

Göbe, F., Timmermanns, T., Ney, O., and Kowalewski, S., "Synthesis Tool for Automation Controller Supervision", in *Proc. 2016 13th International Workshop on Discrete Event Systems (WODES) : May 30-June 1, 2016, Xi'an, China / edited by Christos G. Cassandras, Alessandro Giua, Zhiwu Li ; sponsored by IEEE - Control Systems Society*, Piscataway, NJ, 2016, IEEE, pp. 424-431.

Synthesis Tool for Automation Controller Supervision

Bibtex entry :

```
@inproceedings { GTN+16,  
  author = { G{\\"o}be, Florian and Timmermanns, Thomas and Ney,  
Oliver  
and Kowalewski, Stefan },  
  title = { Synthesis Tool for Automation Controller Supervision },  
  booktitle = { 2016 13th International Workshop on Discrete Event  
Systems  
(WODES) : May 30-June 1, 2016, Xi'an, China / edited by  
Christos G. Cassandras, Alessandro Giua, Zhiwu Li ;  
sponsored by IEEE - Control Systems Society },  
  publisher = { IEEE },
```

```

pages = { 424-431 },
year = { 2016 },
address = { Piscataway, NJ },
organization = { 13. International Workshop on Discrete Event
Systems
(WODES), Xi'an (Peoples R China), 2016-05-30 - 2016-06-01 },
doi = { 10.1109/WODES.2016.7497883 },
typ = { PUB:(DE-HGF)7 },
reportid = { RWTH-2016-11199 },
cin = { 122810 / 120000 },
url = { http://publications.rwth-aachen.de/record/679437 },
}

```

[JGN14]

[PDFBIB](#)

Jansen, C., Göbe, F., and Noll, T., "Generating Inductive Predicates for Symbolic Execution of Pointer-Manipulating Programs", in *Proc. Graph transformation : 7th international conference, ICGT 2014, held as part of STAF 2014, York, UK, July 22 - 24, 2014 ; proceedings / Holger Giese ... (eds.)*, Cham [u.a.], 2014 in Lecture notes in computer science, Springer, pp. 65-80.

Generating Inductive Predicates for Symbolic Execution of Pointer-Manipulating Programs

Bibtex entry :

```

@inproceedings { JGN14,
  author = { Jansen, Christina and G{"o"}be, Florian and Noll, Thomas
},
  title = { Generating Inductive Predicates for Symbolic Execution of
  Pointer-Manipulating Programs },
  booktitle = { Graph transformation : 7th international conference,
  ICGT
  2014, held as part of STAF 2014, York, UK, July 22 - 24,
  2014 ; proceedings / Holger Giese ... (eds.) },
  publisher = { Springer },
  pages = { 65-80 },
  series = { Lecture notes in computer science },
  year = { 2014 },
  address = { Cham [u.a.] },
  organization = { Graph transformation : 7. international
conference, York
(UK), 2014-07-22 - 2014-07-24 },
  doi = { 10.1007/978-3-319-09108-2_5 },
  typ = { PUB:(DE-HGF)7 },
  reportid = { RWTH-CONV-206171 },
  cin = { 120000 / 122810 },
  url = { http://publications.rwth-aachen.de/record/444215 },
}

```

[SGW+11]

PDFBIB

Stollenwerk, A., Göbe, F., Walter, M., Arens, J., Kopp, R., and Kowalewski, S., "Smart Data Provisioning for Model-Based Generated Code in an Intensive Care Application", in *Proc. 3rd Joint Workshop On High Confidence Medical Devices, Software, and Systems & Medical Device Plug-and-Play Interoperability : HCMDSS/MDPnP 2011 ; in conjunction with CPSweek 2011 ; April 11, 2011 Chicago, USA*, Chicago, 2011, HCMDSS/MDPnP 2011 ; in conjunction with CPSweek 2011 ; April 11, 2011 Chicago, USA, p. 8.

Smart Data Provisioning for Model-Based Generated Code in an Intensive Care Application

Bibtex entry :

```
@inproceedings { SGW+11,  
  author = { Stollenwerk, André and Göbe, F. and Walter, Marian  
and  
  Arens, Jutta and Kopp, Rüdiger and Kowalewski, Stefan },  
  title = { Smart Data Provisioning for Model-Based Generated Code in  
an  
  Intensive Care Application },  
  booktitle = { 3rd Joint Workshop On High Confidence Medical  
Devices,  
  Software, and Systems & Medical Device Plug-and-Play  
Interoperability : HCMDSS/MDPnP 2011 ; in conjunction with  
CPSweek 2011 ; April 11, 2011 Chicago, USA },  
  publisher = { HCMDSS/MDPnP 2011 ; in conjunction with CPSweek 2011  
; April  
  11, 2011 Chicago, USA },  
  pages = { 8 S. },  
  year = { 2011 },  
  address = { Chicago },  
  organization = { 3. Joint Workshop On High Confidence Medical  
Devices,  
  Software, and Systems & Medical Device Plug-and-Play  
Interoperability, Chicago (USA), 2011-04-11 - 2011-04-11 },  
  typ = { PUB:(DE-HGF)8 },  
  reportid = { RWTH-CONV-006017 },  
  cin = { 611010 / 122810 / 120000 },  
  url = {  
http://www.seas.upenn.edu/~rahulm/Shared/HCMDSS/hcmdss11_aachen.pdf },  
}
```

From:

<https://embedded.rwth-aachen.de/> - **Informatik 11 - Embedded Software**

Permanent link:

<https://embedded.rwth-aachen.de/doku.php?id=en:lehrstuhl:mitarbeiter:goebe>

Last update: **2020/08/08 19:56**

