

Thomas Henn, M.Sc. RWTH

Kontakt

Wissenschaftlicher Mitarbeiter

Tel. +49 241 80 21164

Fax +49 241 80 22150

Email: [henn\[at\]embedded\[dot\]rwth-aachen\[dot\]de](mailto:henn[at]embedded[dot]rwth-aachen[dot]de)

Adresse: Ahornstr. 55, 52074 Aachen, Germany

Büro: 2322

Sprechstunde

Nach Vereinbarung

Forschung

Meine Forschung findet im Rahmen des Exzellenzcluster „Internet of Production“ statt. Der Fokus liegt auf der Softwareanalyse von kollaborativen Robotern. In diesem Kontext befasse ich mich mit dem Entwurf und Implementierung einer Laufzeitverifikation mit prädiktiv Elementen um vor Gefahrensituationen zu Warnen bevor sie eintreten.

Offene Abschlussarbeiten

Bei Fragen bezüglich der ausgeschriebenen Arbeiten oder Initiativbewerbungen für Abschlussarbeiten freue ich mich über eine Kontaktaufnahme per Telefon oder E-Mail

Publikationen

[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
    Zhou, Hans Aoyang and Uysal, Merih Seran and Samsonov,
    Vladimir and Bellgardt, Martin and Brillowski, Florian
    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
},
  year = { 2023 },
  address = { Cham },
  doi = { 10.18154/RWTH-2023-05268 },
  typ = { PUB:(DE-HGF)7 },
  reportid = { RWTH-2023-05268 },
  cin = { 735410 / 080013 / 080067 / 417510 / 421510 / 053300 /
121810
    / 122810 / 111710 / 422610 / 053100 / 053200 / 419110 /
    418710 / 418020 / 122510 / 418910 / 417200 / 124620 / 110000
    / 120000 / 022000 / 111400 / 114620 / 121920 / 124510 /
```

```

    417310 },
    url = {
http://publications.rwth-aachen.de/record/958415/files/958415.pdf },
    illkey = { WS-A.III - Functional Perspective (X080067-WS-A.III) },
}

```

[TDB+23]

PDFBIB

Trinh, M., Dammers, H., Behery, M. A. A., Baier, R. O., Henn, T., Gossen, D., Corves, B., Kowalewski, S., Nitsch, V., Lakemeyer, G., Gries, T., and Brecher, C., "Safety of Human-Robot Collaboration within the Internet of Production", in *Proc. HCI in Business, Government and Organizations : 10th International Conference, HCIBGO 2023, Held as Part of the 25th HCI International Conference, HCII 2023, Copenhagen, Denmark, July 23–28, 2023, Proceedings, Part II / edited by Fiona Nah, Keng Siau*, Cham, 2023 in Lecture Notes in Computer Science, Springer Nature Switzerland, pp. 86-103.

Safety of Human-Robot Collaboration within the Internet of Production

Bibtex entry :

```

@inproceedings { TDB+23,
  author = { Trinh, Minh and Dammers, Hannah and Behery, Mohamed
Anwar
    Abdellatif and Baier, Ralph Oliver and Henn, Thomas and
    Gossen, Daniel and Corves, Burkhard and Kowalewski, Stefan
    and Nitsch, Verena and Lakemeyer, Gerhard and Gries, Thomas
    and Brecher, Christian },
  title = { Safety of Human-Robot Collaboration within the Internet
of
    Production },
  booktitle = { HCI in Business, Government and Organizations : 10th
    International Conference, HCIBGO 2023, Held as Part of the
    25th HCI International Conference, HCII 2023, Copenhagen,
    Denmark, July 23–28, 2023, Proceedings, Part II / edited
    by Fiona Nah, Keng Siau },
  publisher = { Springer Nature Switzerland },
  pages = { 86-103 },
  series = { Lecture Notes in Computer Science },
  year = { 2023 },
  address = { Cham },
  organization = { HCI in Business, Government and Organizations :
10.
    International Conference, Copenhagen (Denmark), 2023-07-23 -
    2023-07-28 },
  doi = { 10.1007/978-3-031-36049-7_7 },
  typ = { PUB:(DE-HGF)7 },
  reportid = { RWTH-2023-07468 },
  cin = { 417310 / 417200 / 419110 / 121920 / 417110 / 122810 /
411910

```

```
/ 120000 / 080067 },  
illkey = { DFG project 390621612 - EXC 2023: Internet of Production  
          (IoP) (390621612) },  
}
```

[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.

Verification of Behavior Trees using Linear Constrained Horn Clauses

Bibtex entry :

```
@inproceedings { HVK+22,  
  author = { Henn, Thomas and V{"o"}lker, Marcus and Kowalewski,  
            Stefan  
            and Trinh, Minh and Petrovic, Oliver and Brecher, Christian },  
  title = { Verification of Behavior Trees using Linear Constrained  
            Horn  
            Clauses },  
  booktitle = { Formal Methods for Industrial Critical Systems (fmics  
                2022) },  
  pages = { 211-225 },  
  year = { 2022 },  
  organization = { 27. International Conference on Formal Methods in  
                  Industrial  
                  Critical Systems },  
  doi = { 10.1007/978-3-031-15008-1_14 },  
  typ = { PUB:(DE-HGF)7 },  
  reportid = { RWTH-2023-00708 },  
  cin = { 417310 / 122810 / 120000 / 417200 / 080067 },  
  url = {  
http://publications.rwth-aachen.de/record/863064/files/863064.pdf },  
  illkey = { WS-A.III - Functional Perspective (X080067-WS-A.III) },  
}
```

From:

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

Permanent link:

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

Last update: 2023/10/13 17:11

