

November 20, 2016

CURRICULUM VITAE FOR THOMAS TROELS HILDEBRANDT
WITH NUMBERED LIST OF PEER-REVIEWED PUBLICATIONS

Date of birth: Oct. 7th, 1972. *Nationality:* Danish.

Marital status: Married to Sybille Hildebrandt

Children: Isabella and Rebekka Hildebrandt.

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IT University of Copenhagen (ITU), Rued Langgaards Vej 7, 2300 Cph S, DK.

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Education and Training Research Management Course at CBS (2014), SHL course on Personal Management of Leadership (2002), PhD in Computer Science, University of Aarhus (Feb., 2000), MSc in Computer Science, University of Aarhus (May 1997).

Positions

- 2012 - present: Independent consultant in digitalization and facilitator of industry knowledge group on digitalization and process-orientation, VidenDanmark.dk
- 2002 - present: Associate Professor, ITU.
- Aug.-Oct. 2006, May-July 2010: Paternal leaves
- Oct. 2000 – 2002: Assistant Professor, ITU.
- Oct. 1999 – Oct. 2000: Post Doc (Resource Constrained Embedded Systems), ITU.
- Aug. 1995 – Aug. 1999: PhD Scholarship (Danish National Research Foundation), BRICS, Aarhus University.

Management positions

- 2015 – present: Facilitator of focus group for processes and digitalisation within the Copenhagen Fintech Innovation and Research (CFIR.dk) network
- October 2014 – October 2016: Member of the Management Committee and head of WG4 (Tools and applications) of EU, ICT COST Action IC1201 *Behavioural Types for Reliable Large-Scale Software Systems* (BETTY)
- 2012 – present: Head of Process and System Models Group, ITU.
- 2012 – 2015: Board Member at ITU

- 2010 – present : Initiator and facilitator of national interest group for *Processes and IT* with more than 250 members within the InfinIT innovation network (www.infinit.dk).
- 2004 – 2011: Director of the International Research School on Foundations for Innovative Research Based Software Technologies (FIRST).
- 2000-2003: Head of Master of Science and Masters study programme in Internet and Software Technology, ITU.

Research Grants as principal investigator

- 2015: Cyber security and ICT Infrastructure with importance to crucial functions in Denmark - Mapping Emergency and Security Processes in the Danish Public Transport Sector and their Dependency on ICT (ProSec), joint with Metropol University College, BaneDanmark and DSB (Received 0.67MDKK, ITU share: 0.44MDKK)
- 2015: Agile modeller af forretningsregler og -processer der kan visualiseres og simuleres ud fra forskellige perspektiver (Kunde, forretning, og IT) (ITU share of received funding 0.125MDKK, Styrelsen for forskning og innovation, cfir.dk)
- 2013-2014: Fra visuel procesdesign og kravspecifikation til fleksible digitale arbejdsgange (ITU share of received funding 0.152MDKK, Styrelsen for forskning og innovation, infinit.dk)
- 2010-2011: Choreographies for Correct Workflows (Koreografier for korrekte arbejdsgange), jointly with Exformatics A/S, Danish Agency for Science/ Technology and Innovation/ RTI/ Videnkupon (ITU share 0.1MDKK)
- 2008 – 2012: *Trustworthy Pervasive Healthcare Processes* (www.TrustCare.eu) project, supported by The Danish Council for Strategic Research (Received funding 8.4MDKK, grant no.: 2106-07-0019, ITU share: approx 4.2MDKK), ITU and Resultmaker A/S (industrial partner).
- 2007 – 2011: *Computer Supported Mobile Adaptive Business Processes* (www.CosmoBiz.org) project, supported by The Danish Council for Independent Research, Technology and Production Sciences (Received funding 5.2MDKK, grant no.: 274-06-0415, ITU share approx 5MDKK), ITU and Microsoft Development Center Copenhagen (industrial partner).

Research Grants as co-principal investigator

- 2014 – 2017: *Computational Artifacts: Towards a design-oriented theory of computational artifacts in cooperative work practices* (compart.ku.dk/) project, joint with Copenhagen University (PI) and Copenhagen Business School. Funded by The Velux Foundation (5.8MDKK, ITU share 2MDKK)

- 2014-2016: EU COST Action - Behavioural Types for Reliable Large-Scale Software Systems
- 2012 – 2014: Supervisor of Industrial PhD project: *Foundations of Declarative Model-driven Software Engineering for Distributed Process Aware Information Systems*, PhD thesis title: Technologies for Flexible Cross-organizational Case Management Systems, (www.itu.dk/people/tslaats), supported by the Danish Research Agency (1MDKK) and Exformatics A/S (industrial partner).
- 2009 – 2013: *Services in Context: Jangling Genies (Genie)* project, joint with Peking University, Beijing, China. The Danish Council for Strategic Research (8.4MDKK, grant no.: 2106-080046)
- Jan. 2004 – 2008: Bigraphical Programming Languages (BPL) project supported by The Danish Council for Strategic Research (ITU share of received funding 5.6MDKK, grant no.: 2059-03-0031) and ITU.
- Co-applicant of PhD scholarships as Director of the Foundations of Innovative Research-based Software Technologies research school.
- 2006 – 2008: *Calculi for Mobile Security* project, funded by the Danish Research Agency (grant no.: 272-05-0258).

Longer Research Visits

- Feb. 1998 – Jun. 1998: Laboratory for Foundations of Computer Science (LFCS), University of Edinburgh. (Hosts: Gordon Plotkin and Samson Abramsky).
- Sep. 1998: School of Computer Science, McGill University, Montreal (Host: Prakash Panangaden).

Scientific topics and key results

My research falls in three main categories:

1. Foundations, tools and applications for software engineering of computer-supported adaptive and reliable business processes, in particular DCR Graphs and the DCRGraphs.net and dcr.itu.dk tools jointly with S. Debois and former PhD students R. R. Mukkamala and T. Slaats (2007-2014, supported by CosmoBiz, TrustCare, Genie, FLExCMS, CompArt).
2. Foundations, tools and applications for Meta process-modelling languages, in particular extensions of the theory of bigraphical reactive systems and the Bigraph tools jointly with L. Birkedal and former PhD students S. Debois, G. Perrone and Espen Højsgaard (1996-1999, 2004-2007 supported by BRICS, the BPL, CosmoBiz and Genie research projects)

3. Foundational reasoning techniques for higher-order mobile computing processes, in particular the Higher-order mobile embedded resources (Homer) calculus and bisimulation reasoning techniques jointly with J. C. Godskesen and former PhD student M. Bundgaard (1999-2003, supported by ITU),

Present Postdocs and PhD students (1) Håkon Normann (PhD, ITU, CompArt project)

Past PostDocs (3) and PhDs (7) Tijs Slaats (Industrial PhD, Exformatics and subsequent postdoc on CompArt), Gian Perrone (PhD, ITU, Genie project), Mikkel Bundgaard (PostDoc, ITU, CosmoBiz project), Geoffrey Washburn (PostDoc, ITU, TrustCare project), and Magnus Nilsson (PostDoc, ITU, CosmoBiz project). Hugo A. Lopez (PhD, ITU and Resultmaker), Espen Højsgaard (PhD, ITU, CosmoBiz project), Raghava Rao Mukkamala (PhD, ITU, TrustCare project), Mikkel Bundgaard (PhD, ITU).

Past co-supervised PhD Students (6) Lasse Nielsen (PhD co-supervised with Fritz Henglein, DIKU, TrustCare project), Karen Marie Lyng (PhD co-supervised with Finn Kensing, DIKU, Resultmaker), Søren Debois (PhD co-supervised with Lars Birkedal, ITU, BPL project), Wang Wusheng (Visiting PhD student, Peking University), Francesco Zanitti (PhD, terminated, co-supervised with Arne Glenstrup, ITU, Genie project), Maxime Beauquier (PhD, terminated, co-supervised with Carsten Schurmann, ITU, TrustCare project).

Selected Invited Research Presentations:

- *Modelling Security Policies and Emergency Procedures with DCR Graphs*. Invited talk at Advanced Digital Sciences Center, Singapore, September 2016, <http://www.i2r.a-star.edu.sg/icsd/secuts/seminar-form.php?seminarid=c-seminar-20160902.html>
- *Flexible, Adaptable & Compliant Business Systems with Dynamic Condition Response Graphs*. Keynote at Formal methods for Analysis of Business Systems (ForMABS). Co-located with ASE 2016, September 4, 2016 <http://www.tcs.com/research/Pages/ForMABS2016-Program.aspx>
- *Flexible, Adaptable & Compliant Process-Aware Information Systems with Dynamic Condition Response Graphs*. Part of the series: HPI-Colloquium (WT 2015), Hasso-Plattner-Institut, 5 Nov 2015 <https://www.tele-task.de/archive/lecture/overview/8751/>
- *Modular Specification and Run-time Refinement for Process-Aware Information Systems with Dynamic Sub Processes*, Invited Talk, SOAMED PhD School, TU Berlin, Germany, 2 Feb 2015

- *Session Types for Trustworthy Pervasive Healthcare Services*, Invited Talk at Sixth Workshop on Formal Languages and Analysis of Contract-Oriented Software, Bertinoro, Italy, 19 September 2012
- *Contracts as Dynamic Condition Response Graphs*, Invited Talk at Fifth Workshop on Formal Languages and Analysis of Contract-Oriented Software, Malaga, Spain, Sep, 2011
- *SOAMED-Vorlesung: Trustworthy Pervasive Healthcare Services*, Invited talk at the PhD school on service-oriented Architectures for the Integration of Software-based Processes, exemplified by Health Care Systems and Medical Technology (SOAMED), Berlin, Germany, May, 2011
- *Sorting out Higher-order Contexts by playing Games with the Int-construction*, Computer Science Seminars, University of Leicester, UK, Feb, 2009
- *Polarized and Higher-order Bigraphs from Geometry of Interaction*, CHOCO project meeting, Lyon, France, June, 2008
- *Bigraphs and Distributed Reactive XML - an XML-centric model of computation?*, Computer Science Seminar, University of Brighton, UK, 2005
- *A Bigraphical Programming Environment - contributing to the UK grand challenge on Science for Global Ubiquitous Computing*, Departmental talk, Dept. of Computer Science, University of Birmingham, UK, 2005
- *Higher-Order Mobile Embedded Resources*, Dagstuhl seminar 04241, Germany, 2004.

Grant and PhD thesis evaluation

- External evaluator on national research grant applications in Iceland, Canada (NSERC), France and Netherlands.
- In committees for PhD thesis evaluation at Uppsala University, TU Berlin, University of Bologna, Paris l'Ecole Polytechnique, University of Cambridge, Aarhus, Aalborg and ITU Copenhagen.

Program Chairs, Committees and Refereeing

- Program co-chair of BPM 2017 Industry track (15th International Conference on Business Process Management), WS-FM:FASOCC'14 (11th International Workshop on Web Services and Formal Methods: Formal Aspects of Service-Oriented and Cloud Computing), chair of MEMO 2014 (1st International Workshop on Meta Models for Process Languages), co-chair of EXPRESS'07 and EXPRESS'08 (International Workshop on Expressiveness in Concurrency).

- PC member of international conferences and symposia: BPM 2012-2017, FoSSaCS 2017, CPSS 2017, ICTAC 2015, ICTH 2014, FHIES 2011, MFPS 2010, CONCUR 2009 & 2015, COORDINATION 2009, TGC 2008, and several workshops including NWPT 2016, PLACES 2013-2014, MeMo2014, DAB'13-'14, Bigraph 2013, FOCLASA 2012, WS-FM 2011, PNSE'10,'12-'14, DMC 2009, ORGMOD 2009, ICE'08-'10, CPN '06-'09, ICECCS 2009, International Workshop on Combining Theory and Systems Building in Pervasive Computing, EXPRESS'05,'07,'08,'10 3rd EATCS Workshop in the Foundations of Global Computing (2004), and Categorical Methods for Concurrency, Interaction and Mobility (2002-2004).

Research Organisational Work

- Organiser of MEMO 2014 (1st International Workshop on Meta Models for Process Languages) affiliated with DisCoTec, June 6th, 2014, TU Berlin, Germany
- Organiser of FIRST PhD Autumn School and Workshop on Theory and Practice of Business Process Execution and Service Orientation, ITU, October, 2007
- Organiser of the 10th International Conference and affiliated PhD summer school on Category Theory and Computer Science
- Organiser and co-chair of International Workshops on Categorical Methods for Concurrency, Interaction and Mobility, affiliated with CONCUR 2003 (Marseille) and CTCS 2004 (Copenhagen).
- Organiser of EEF Summer School in Semantics of Computation, Aarhus University, 1999.
- 2002-2003: Organiser and PC-member of workshops on Categorical Methods for Concurrency, Interaction and Mobility, affiliated with CONCUR 2002, CONCUR 2003 and CTCS 2004.
- Member of national competence group on XML
- 2003/2004: Organiser of the 10th International Conference on Category Theory and Computer Science (CTCS), August 2004.
- Refereeing for Journal of MSCS, TCS, Information and Computation, TOPLAS, The Computer Journal (Oxford University Press), Journal of Logic and Computation, Journal of ACM, Logical Methods in Computer Science, International Journal of Computer Mathematics, CONCUR, LICS, POPL, FST&TCS, BPM, ICALP, FOSSACS, MFCS, MFPS, ICFL, CTCS, CALCO, RTA, CAV, PADO-II, ESOP, TAMC, and several workshops.

10 Most cited publications: (according to Google Scholar, November, 2016)

- [1] Lars Birkedal, Søren Debois, Ebbe Elsborg, Thomas Hildebrandt, Henning Niss, *Biographical Models of Context-aware Systems*, In Proceedings of FoSSaCS, Vienna, Austria, 2006. BPL Project. (Citations 109).
- [2] Thomas T. Hildebrandt, Raghava Rao Mukkamala: Declarative Event-Based Workflow as Distributed Dynamic Condition Response Graphs. Original and full (electronic journal EPTCS) version of PLACES 2010 paper (Citations 98)
- [3] Jens Christian Godskesen, Thomas Hildebrandt, and Vladimiro Sassone. *A Calculus of Mobile Resources*. In Proceedings of CONCUR 2002, LNCS 2421, 2002. (Citations 67)
- [4] Jens Christian Godskesen, Thomas Hildebrandt and Mikkel Bundgaard *Bisimulation congruences for Homer - a calculus of higher order mobile embedded resources*, Technical Report, TR-2004-52, IT University of Copenhagen. (Citations 59)
- [5] Thomas Troels Hildebrandt, Prakash Panangaden, and Glynn Winskel. *A Relational Model of Non-deterministic Dataflow*. Full (journal of MSCS) and conference paper in proceedings of CONCUR'98, LNCS 1466, pp. 613–628, September 1998. (Citations 46)
- [6] Karen Marie Lyng, Thomas Hildebrandt, Raghava Rao Mukkamala. *From Paper Based Clinical Practice Guidelines to Declarative Workflow Management*, In proceedings of Business Process Management Workshops, 2nd International Workshop on Process-oriented information systems in healthcare (ProHealth 08), Milan, September, pp 336-347, 2008. (Citations 44)
- [7] Thomas Hildebrandt, Raghava Rao Mukkamala and Tijs Slaats. *Nested dynamic condition response graphs*. In proceedings of Fundamentals of Software Engineering (FSEN), pages 343-350, 2012 (Citations 43)
- [8] G. Perrone, S. Debois and T. T. Hildebrandt. *A model checker for bigraphs*. In proceedings of 27th Annual ACM Symposium on Applied Computing), pages 1320-1325, 2012 (Citations 36)
- [9] Thomas Hildebrandt, Henning Niss and Martin Olsen *Formalizing Business Process Execution with Bigraphs and Reactive XML*, 8th International Conference on Coordination Models and Languages (COORDINATION), Bologna, Italy, LNCS 4038, June, 2006. (Citations 32)
- [10] Mikkel Bundgaard and Thomas Hildebrandt *Biographical Semantics of Higher-order Mobile Embedded Resources with Local Names*, GT-VC 2005, Workshop on Graph Transformation for Verification and Concurrency, San Francisco, USA, August 22, 2005. ENTCS, vol. 154 (2), pp. 7-29. (Citations 31)

List of publications indicating scientific highlights (with *)

More than 60 peer-reviewed publications and 1000 citations, (H Index: 21 and i10-index: 31) according to Google Scholar, Dec, 2015 (including self-citations).

Prefaces and Editorials:

[P7] Thomas T. Hildebrandt, Antnio Ravara, Jan Martijn van der Werf, Matthias Weidlich: *Web Services, Formal Methods, and Behavioral Types - 11th International Workshop*, WS-FM 2014, Eindhoven, The Netherlands, September 11-12, 2014, and 12th International Workshop, WS-FM/BEAT 2015, Madrid, Spain, September 4-5, 2015, Revised Selected Papers. Lecture Notes in Computer Science 9421, Springer 2016, ISBN 978-3-319-33611-4

[P6] Marco Carbone, Thomas T. Hildebrandt, Joachim Parrow, Matthias Weidlich: *Editorial. Formal Asp. Comput.*, 28(4): 529-530 (2016) [P5] Gian Luca Cattani, Thomas T. Hildebrandt, Daniele Varacca: *Preface to special issue: Models of Interaction: Essays in Honour of Glynn Winskel*. Theor. Comput. Sci. 546: 1-2 (2014)

[P4] Thomas T. Hildebrandt, Daniele Gorla: *Preface to special issue: Expressiveness in Concurrency 2008*. Mathematical Structures in Computer Science 20(1): 1-2 (2010)

[P3] Thomas T. Hildebrandt, Daniele Gorla: *Preface to Proceedings of the 15th Workshop on Expressiveness in Concurrency (EXPRESS 2008)*, Toronto, Canada. Electr. Notes Theor. Comput. Sci. 242(1): 1-2 (2009)

[P2] Roberto M. Amadio, Thomas T. Hildebrandt: *Preface to Proceedings of the 14th International Workshop on Expressiveness in Concurrency (EXPRESS 2007)*. Electr. Notes Theor. Comput. Sci. 194(2): 1 (2008)

[P1] Thomas T. Hildebrandt, Alexander Kurz: *Preface to CMCIM and GETCO 2003* Electr. Notes Theor. Comput. Sci. 100: 3 (2004)

Journals with peer-review:

[J7*] Søren Debois, Thomas Hildebrandt, Tijs Slaats, Nobuko Yoshida: Type-checking Liveness for Collaborative Processes with Bounded and Unbounded Recursion, Journal of Logical Methods in Computer Science (LMCS): 12(1) (2016).

[J6] Håkon Normann, Christian Johansen, Thomas Hildebrandt. *Declarative event based models of concurrency and refinement in psi-calculi*. Journal of Logic and Algebraic Methods in Programming (JLAP) 85(3):368-398 (2016).

[J5] Gian Perrone, Søren Debois, Thomas T. Hildebrandt: *A verification environment for bigraphs*. ISSE 9(2): 95-104 (2013)

[J4*] Thomas T. Hildebrandt, Raghava Rao Mukkamala, Tijs Slaats, Francesco Zanitti: *Contracts for cross-organizational workflows as timed Dynamic Condition Response Graphs*. J. Log. Algebr. Program. 82(5-7): 164-185 (2013)

[J3] Mikkel Bundgaard, Thomas T. Hildebrandt, Jens Chr. Godskesen: *A CPS encoding of name-passing in Higher-order mobile embedded resources*. Theor. Comput. Sci. 356(3): 422-439 (2006)

- [J2] Thomas T. Hildebrandt, Prakash Panangaden, Glynn Winskel: *A relational model of non-deterministic dataflow*. *Mathematical Structures in Computer Science* 14(5): 613-649 (2004)
- [J1] Thomas T. Hildebrandt: *Towards categorical models for fairness: fully abstract presheaf semantics of SCCS with finite delay*. *Theor. Comput. Sci.* 294(1/2): 151-181 (2003)

E-Journals with peer-review:

- [EJ7] Alexander John Faithfull, Gian Perrone, Thomas T. Hildebrandt: *Big Red: A Development Environment for Bigraphs*. *ECEASST* 61 (2013)
- [EJ6] Mikkel Bundgaard, Thomas T. Hildebrandt, Jens Chr. Godskesen: *Modelling the Security of Smart Cards by Hard and Soft Types for Higher-Order Mobile Embedded Resources*. *Electr. Notes Theor. Comput. Sci.* 194(1): 23-38 (2007)
- [EJ5] Thomas T. Hildebrandt, Henning Niss, Martin Olsen, Jacob W. Winther: *Distributed Reactive XML*. *Electr. Notes Theor. Comput. Sci.* 150(1): 61-80 (2006)
- [EJ4] Mikkel Bundgaard, Thomas T. Hildebrandt: *Bigraphical Semantics of Higher-Order Mobile Embedded Resources with Local Names*. *Electr. Notes Theor. Comput. Sci.* 154(2): 7-29 (2006)
- [EJ3] Mikkel Bundgaard, Thomas T. Hildebrandt, Jens Chr. Godskesen: *A CPS Encoding of Name-Passing in Higher-Order Mobile Embedded Resources*. *Electr. Notes Theor. Comput. Sci.* 128(2): 131-150 (2005)
- [EJ2] Thomas T. Hildebrandt: *Categorical Models for Fairness: Completion vs Delay*. *Electr. Notes Theor. Comput. Sci.* 40: 188 (2000)
- [EJ1] Thomas T. Hildebrandt: *A Fully abstract presheaf semantics for SCCS with finite delay*. *Electr. Notes Theor. Comput. Sci.* 29: 102-126 (1999)

Conferences and Symposia with peer-review:

- [C29*] David A. Basin, Sren Debois, Thomas T. Hildebrandt: *In the Nick of Time: Proactive Prevention of Obligation Violations*, *CSF* 2016: 120-134
- [C28] Rik Eshuis, Søren Debois, Tijs Slaats, Thomas T. Hildebrandt: *Deriving Consistent GSM Schemas from DCR Graphs*, *ICSOC* 2016: 467-482
- [C27*] Søren Debois, Thomas T. Hildebrandt, Tijs Slaats: *Concurrency & Asynchrony in Declarative Workflows*, *Lecture Notes in Computer Science: Proceedings of 13th International Conference on Business Process Management (BPM 2015)*. Springer, Vol. 9253, s. 72-89
- [C26*] Søren Debois, Thomas T. Hildebrandt, Tijs Slaats: *Safety, Liveness and Run-time Refinement for Modular Process-Aware Information Systems with Dynamic Sub Processes*. Springer LNCS 9109, *FM* 2015: 19 pages
- [C25] Søren Debois, Thomas T. Hildebrandt, Tijs Slaats: *Hierarchical Declarative Modelling with Refinement and Sub-processes*. *BPM* 2014: 18-33
- [C24] Søren Debois, Thomas T. Hildebrandt, Tijs Slaats, Nobuko Yoshida: *Type Checking Liveness for Collaborative Processes with Bounded and Unbounded*

- Recursion*. FORTE 2014: 1-16
- [C23] Tijs Slaats, Raghava Rao Mukkamala, Thomas T. Hildebrandt, Morten Marquard: *Exformatics Declarative Case Management Workflows as DCR Graphs*. BPM 2013: 339-354
- [C22] Raghava Rao Mukkamala, Thomas T. Hildebrandt, Tijs Slaats: *Towards Trustworthy Adaptive Case Management with Dynamic Condition Response Graphs*. EDOC 2013: 127-136
- [C21] Marco Carbone, Anders Skovbo Christensen, Flemming Nielson, Hanne Riis Nielson, Thomas T. Hildebrandt, Martin Sølvkjær: *ICT-powered Health Care Processes - (Position Paper)*. FHIES 2013: 59-68
- [C20] Anders S. Henriksen, Lasse Nielsen, Thomas T. Hildebrandt, Nobuko Yoshida, Fritz Henglein: *Trustworthy Pervasive Healthcare Services via Multi-party Session Types*. FHIES 2012: 124-141
- [C19] Gian Perrone, Søren Debois, Thomas T. Hildebrandt: *A model checker for Bigraphs*. SAC 2012: 1320-1325
- [C18] Thomas T. Hildebrandt, Raghava Rao Mukkamala, Tijs Slaats: *Designing a Cross-Organizational Case Management System Using Dynamic Condition Response Graphs*. EDOC 2011: 161-170
- [C17] Thomas T. Hildebrandt, Raghava Rao Mukkamala, Tijs Slaats: *Declarative Modelling and Safe Distribution of Healthcare Workflows*. FHIES 2011: 39-56
- [C16] Thomas T. Hildebrandt, Raghava Rao Mukkamala, Tijs Slaats: *Nested Dynamic Condition Response Graphs*. FSEN 2011: 343-350
- [C15] Thomas T. Hildebrandt, Raghava Rao Mukkamala, Tijs Slaats: *Safe Distribution of Declarative Processes*. SEFM 2011: 237-252
- [C14] Tim Hallwyl, Fritz Henglein, Thomas T. Hildebrandt: *A standard-driven implementation of WS-BPEL 2.0*. SAC 2010: 2472-2476
- [C13] Raghava Rao Mukkamala, Thomas T. Hildebrandt: *From Dynamic Condition Response Structures to Büchi Automata*. TASE 2010: 187-190
- [C12] Thomas T. Hildebrandt, Hugo A. Lopez: *Types for Secure Pattern Matching with Local Knowledge in Universal Concurrent Constraint Programming*. ICLP 2009: 417-431
- [C11] Lars Birkedal, Søren Debois, Thomas T. Hildebrandt: *On the Construction of Sorted Reactive Systems*. CONCUR 2008: 218-232
- [C10] Mikkel Bundgaard, Arne J. Glenstrup, Thomas T. Hildebrandt, Espen Højsgaard, Henning Niss: *Formalizing Higher-Order Mobile Embedded Business Processes with Binding Bigraphs*. COORDINATION 2008: 83-99
- [C9] Ebbe Elsborg, Thomas T. Hildebrandt, Davide Sangiorgi: *Type Systems for Bigraphs*. TGC 2008: 126-140
- [C8] Lars Birkedal, Søren Debois, Thomas T. Hildebrandt: *Sortings for Reactive Systems*. CONCUR 2006: 248-262
- [C7] Thomas T. Hildebrandt, Henning Niss, Martin Olsen: *Formalising Business Process Execution with Bigraphs and Reactive XML*. COORDINATION 2006: 113-129
- [C6] Lars Birkedal, Søren Debois, Ebbe Elsborg, Thomas T. Hildebrandt, Henning Niss: *Biographical Models of Context-Aware Systems*. FoSSaCS 2006: 187-

- [C5] Jens Chr. Godskesen, Thomas T. Hildebrandt: *Extending Howe's Method to Early Bisimulations for Typed Mobile Embedded Resources with Local Names*. FSTTCS 2005: 140-151
- [C4] Jens Chr. Godskesen, Thomas T. Hildebrandt, Vladimiro Sassone: *A Calculus of Mobile Resources*. CONCUR 2002: 272-287
- [C3] Sibylle B. Fröschle, Thomas T. Hildebrandt: *On Plain and Hereditary History-Preserving Bisimulation*. MFCS 1999: 354-365
- [C2] Thomas T. Hildebrandt, Prakash Panangaden, Glynn Winskel: *A Relational Model of Non-deterministic Dataflow*. CONCUR 1998: 613-628
- [C1] Thomas T. Hildebrandt, Vladimiro Sassone: *Comparing Transition Systems with Independence and Asynchronous Transition Systems*. CONCUR 1996: 84-97

Workshops with peer-review:

- [W18] Sren Debois, Thomas T. Hildebrandt, Lene Sandberg: *Experience Report: Constraint-Based Modelling and Simulation of Railway Emergency Response Plans*, ANT/SEIT 2016: 1295-1300
- [W17] Søren Debois, Thomas T. Hildebrandt, Morten Marquard, Tijs Slaats: *Bridging the Valley of Death: A Success Story on Danish Funding Schemes Paving a Path from Technology Readiness Level 1 to 9*. Proceedings of the 2nd International Workshop on Software Engineering Research and Industrial Practice. IEEE Computer Society Press, s. 54-57, May 2015
- [W16*] Søren Debois, Thomas T. Hildebrandt, Morten Marquard, Tijs Slaats: *Hybrid process technologies in the financial sector* CEUR Workshop Proceedings: Proceedings of the Industry Track at the 13th International Conference on Business Process Management 2015 (BPM-Industry 2015), Vol. 1439, s. 107-119
- [W15] Søren Debois, Thomas Hildebrandt, Morten Marquard and Tijs Slaats *A Case for Declarative Process Modelling: Agile Development of a Grant Application System*, to appear in proceedings of AdaptiveCM 2014 3rd International Workshop on Adaptive Case Management and other non-workflow approaches to BPM, 2014.
- [W14] Thomas T. Hildebrandt, Raghava Rao Mukkamala, Tijs Slaats, Francesco Zanitti: *Modular context-sensitive and aspect-oriented processes with dynamic condition response graphs*. FOAL 2013: 19-24
- [W13] Thomas T. Hildebrandt, Morten Marquard, Raghava Rao Mukkamala, Tijs Slaats: *Dynamic Condition Response Graphs for Trustworthy Adaptive Case Management*. OTM Workshops 2013: 166-171
- [W12] Mario Bravetti, Marco Carbone, Thomas T. Hildebrandt, Ivan Lanese, Jacopo Mauro, Jorge A. Perez, Gianluigi Zavattaro: *Towards Global and Local Types for Adaptation*. SEFM Workshops 2013: 3-14
- [W11] Wusheng Wang, Thomas T. Hildebrandt: *Dynamic Ontologies and Semantic Web Rules as Bigraphical Reactive Systems*. WS-FM 2013: 127-146

- [W10] Thomas T. Hildebrandt, Francesco Zanitti: A process-oriented event-based programming language. DEBS 2012: 377-378
- [W9] Marco Carbone, Thomas T. Hildebrandt, Gian Perrone, Andrzej Wasowski: Refinement for Transition Systems with Responses. FIT 2012: 48-55
- [W8] Gian Perrone, Søren Debois, Thomas T. Hildebrandt: Bigraphical Refinement. Refine 2011: 20-36
- [W7] David Raymond Christiansen, Marco Carbone, Thomas T. Hildebrandt: Formal Semantics and Implementation of BPMN 2.0 Inclusive Gateways. WS-FM 2010: 146-160
- [W6] Marco Carbone, Davide Grohmann, Thomas T. Hildebrandt, Hugo A. Lopez: A Logic for Choreographies. PLACES 2010: 29-43
- [W5] Thomas T. Hildebrandt, Raghava Rao Mukkamala: Declarative Event-Based Workflow as Distributed Dynamic Condition Response Graphs. PLACES 2010: 59-73
- [W4] Karen Marie Lyng, Thomas T. Hildebrandt, Raghava Rao Mukkamala: From Paper Based Clinical Practice Guidelines to Declarative Workflow Management. Business Process Management Workshops 2008: 336-347
- [W3] Raghava Rao Mukkamala, Thomas T. Hildebrandt, Janus Boris Tøth: The Resultmaker Online Consultant: From Declarative Workflow Management in Practice to LTL. EDOCW 2008: 135-142
- [W2] Thomas Hildebrandt, Henning Niss, Martin Olsen and Jacob W. Winther. *Distributed Reactive XML*, 1st International Workshop on Methods and Tools for Coordinating Concurrent, Distributed and Mobile Systems, Namur, Belgium, April, 2005. ENTCS
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- [M7] Mikkel Bundgaard, Arne John Glenstrup, Thomas Hildebrandt, Espen Hjøsgaard, and Henning Niss. *Formalizing WS-BPEL and Higher Order Mobile Embedded Business Processes in the Bigraphical Programming Languages (BPL) Tool*, TR-2008-103, IT University of Copenhagen, 2008.
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Selected Science Communication and Appearances in Press

1. *Privacy-by-design og compliance i forhold til persondataforordningen med DCR-grafer*. Presentation at Databeskyttelsesdagen 2017 (Data protection day 2017), 6th national conference, Børsen, [Databeskyttelsesdagen.dk](http://databeskyttelsesdagen.dk), January, 2017,
2. *Formåls-orienteret kortlægning af processer og data*. Presentation at seminar "Forberedt på den nye persondataforordning?" (prepared for the General Data Protection Regulation?) at Copenhagen Fintech Innovation and Research (CFIR.dk), October, 2016
3. *How do we prepare for a coordinated cyber-physical attack on critical infrastructures?*, joint keynote with D. Basin at InfoSecurity 2016 Denmark, Øksnehallen, Copenhagen, May 3-4th, 2016, <http://events.workvisually.com/thomas-hildebrandt-david-basin-how-do-we-prepare>
4. *Undgå at processerne stivner ved at fokusere på hvorfor fremfor hvordan*. Invited speaker at seminar on cross-organisational cases and connected processes (sager på tværs og sammenhængende processer) , Local Government Denmark (KL), December 9, 2015.
5. *IT supported process management in healthcare - what should be standardized and what should not?*. Invited speaker at seminar on standardization of the healthcare sector (Standardisering af sundhedsvæsenet), E-sundhedsobservatoriet, DaCHI, Aalborg Universitet, August 25, 2014
6. *Digitalisering: BPM Udfordringer og Lean løsninger*, 25 November, 2013, Deloitte, Copenhagen, (Keynote speaker, in danish)

7. *Fra strategi til handling - hvordan digitaliserer man uforudsigelige processer?*. Inviteret foredrag som konsulent ved Temadag om Digital Forvaltning i et strategisk perspektiv for region Syd, Midt og Nord, Vejle, 26. Oktober 2012
8. *Forbedrede finansielle processer med Business Process Management ? Fra Office Automation via BPM til tvær-organisatorisk Case Management og Citizen Development*, inviteret foredrag ved Get F'IT Seminar om Business Process Management i den finansielle sektor, Finanssektorens hus, København, 25. september 2012.
9. *Fleksible sundhedsprocesser*. Foredrag ved Infnit temadag om sammenhængende patientforløb, sundhedsprocesser og it, København, April, 2012
10. *Fra automatiserede arbejdsgange til it-støttet samarbejde*. Inviteret foredrag ved VidenDanmark seminar om Digitalisering og procesoptimering - Fokus på digitalisering og procesorientering af videnarbejde og sagsbehandling?, Symbion Science Park, 25. januar, 2012
11. *Sagsbehandlere drukner i computerbøvl*, dr.dk, June 16th, 2011
12. *Sådan vil din GPS forandre din mobil-brug*, Computerworld Online (computerworld.dk), December 28th, 2010.
13. *IT-Universitetet: Objekter er yt, processer er in*, Version2 Online (version2.dk), December 28th, 2009.
14. *Nutidens it er forældet*, NewsMarket Online, December 28th, og Presswire online 23th December, 2009.
15. *Forsker kritiserer forældede it-løsninger*, ComOn Online, December 23th, 2009.
16. *En gang på nettet, altid på nettet*. Interview in chapter of the book: "Den åbne dagbog - unges brug af nettet", ISBN 9788792208897, 2008.
17. *Sæt strøm til rutinerne*. Interview in "Momentum", Microsoft Danmark, September/08.
18. *Pas på Dankortet*, TV2-øst web news, 8pm, April 9th, 2006
19. *Dankort svindel*, TV2-øst. 7:30pm television news, April 9th, 2006.
20. *Karriere som ph.d. i erhvervslivet?*, readIT, February 1st, 2005
21. *Datalogiens store udfordringer: Allestedsnærværende computere*, Harddisken P1, Januar 15th, 2005
22. *Allestedsnærværende computere*, DR Videnskab+IT (online), Januar 5th, 2005