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.
Private address: Dyssegårdsvej 62, 2870 Dyssegård, Denmark.
Private email: thomas.hildebrandt@gmail.com
Private Telephone: (+45)31425279 *Work Address:* IT University of Copenhagen
(ITU), Rued Langgaards Vej 7, 2300 Copenhagen S, Denmark.
Work Telephone: (+45)7218 5279,
Work Email: hilde@itu.dk. *Web:* www.itu.dk/people/hilde/

Education

- 2002: SHL course on Personal Management of Leadership

- Feb. 2000: PhD in Computer Science, University of Aarhus.

- May 1997: MSc in Computer Science, University of Aarhus.

Present and recent positions

- Feb. 2012 - present: Facilitator of industry knowledge group on digitalization and process-orientation, VidenDanmark.dk. (in danish)

- 2002 - present: Associate Professor, ITU. Head of Process and System Models Group. Member of Programming, Logic and Semantics Group.

- 2004 - 2011: Director of the International Research School on Foundations for Innovative Research Based Software Technologies (www.FIRST.dk).

- Aug.-Oct. 2006 and May-July 2010: Paternal leaves

- 2000-2003: Head of Master of Science and Masters study programme in Internet and Software Technology, ITU.

- 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, Daimi, Aarhus University.

Research Grants   (Present projects)

- 2012-2014: Supervisor on the *Technologies for Flexible Cross-organizational Case Management Systems* (www.itu.dk/people/tslaats) industrial PhD project, supported by the Danish Research Agency and Exformatics A/S (industrial partner).

- 2009 – 2013: Co-investigator on the *Services in Context: Jingling Genies (Genie)* project, joint with Peking University, Beijing, China. The Danish Council for Strategic Research

Research Grants   (Past projects)

- 2008 – 2012: Principal investigator on the *Trustworthy Pervasive Healthcare Processes* (www.TrustCare.eu) project, supported by The Danish Council for Strategic Research (8.4MDKK, grant no.: 2106-07-0019), ITU and Resultmaker A/S (industrial partner).

- 2007 – 2011: Principal investigator on the *Computer Supported Mobile Adaptive Business Processes* (www.CosmoBiz.org) project, supported by The Danish Council for Independent Research, Technology and Production Sciences (5.2MDKK, grant no.: 274-06-0415), ITU and Microsoft Development Center Copenhagen (industrial partner).

- 2006 – 2008: Co-investigator on the *Calculi for Mobile Security* project, funded by the Danish Research Agency (grant no.: 272-05-0258).

- Jan. 2004 – 2008: Co-investigator on the Bigraphical Programming Languages (BPL) project supported by The Danish Council for Strategic Research (5.6MDKK, grant no.: 2059-03-0031) and ITU.

Networks and Groups

- October 2012 – present: Member of the Management Committe of EU, ICT COST Action IC1201 *Behavioural Types for Reliable Large-Scale Software Systems* (BETTY)

- january 2012 – present : Employed by Videndanmark.dk as expert and faciliatator of industry knowledge network group for *Digitalization and Process-orientation* affiliated to Processes and IT became a strategic area of the InfinIT innovation network (www.infinit.dk) in 2012.

- 2010 – present : Initiator and fasciliatator of national interest group for *Processes and IT* within the InfinIT innovation network (www.infinit.dk) having 248 members by Oct 31, 2012.

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 Focus Areas: Formal process models and semantics for concurrent, distributed and mobile systems, and their strategic applications to the development of new process languages and technologies for interacting concurrent processes involving both computers, humans and their sourounding context, e.g. as found in process-oriented systems for workflow and business process management, and within the overlapping areas of pervasive, ubiquotous, and cyber-physical computing systems.

Present Postdocs Raghava Rao Mukkamala (TrustCare and ITU)

Present PhD students Tijs Slaats (Industrial PhD, Exformatics) and Francesco Zanitti (ITU, Genie project, on leave).

Past PostDocs Søren Debois (Genie project), Mikkel Bundgaard (CosmoBiz project), Geoffrey Washburn (TrustCare project), and Magnus Nilsson (CosmoBiz project).

Past PhD Students Gian Perrone (ITU, Genie project), Hugo A. Lopez (ITU and Resultmaker), Espen Højsgaard (ITU, CosmoBiz project), Raghava Rao Mukkamala (ITU, TrustCare project), Mikkel Bundgaard (ITU).

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

Publications: More than 50 peer-reviewed publications. According to Google Scholar (Feb, 2013) I have 676 citations. My H Index is 16 and i10-index 24.

10 Most cited publications: (according to Google Scholar, Feb. 20, 2013)
[1] Lars Birkedal, Søren Debois, Ebbe Elsborg, Thomas Hildebrandt, Henning Niss, *Bigraphical Models of Context-aware Systems*, In Proceedings of FoSSaCS, Vienna, Austria, 2006. BPL Project. (Citations 72).

[2] Jens Christian Godskesen, Thomas Hildebrandt, and Vladimiro Sassone. *A Calculus of Mobile Resources.* In Proceedings of CONCUR 2002, LNCS 2421, 2002. (Citations 62)

[3] 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 42)

[4] 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 31)

[5] Mikkel Bundgaard and Thomas Hildebrandt *Bigraphical 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 28)

[6] Thomas Troels Hildebrandt, Prakash Panangaden, and Glynn Winskel. *A Relational Model of Non-deterministic Dataflow.* In proceedings of CONCUR'98, LNCS 1466, pp. 613–628, September 1998. (Citations 27)

[7] 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 26)

[8] L. Birkedal, S. Debois, T. Hildebrandt *Sortings for Reactive Systems.* In Proceedings of CONCUR 2006, Bonn, Germany, LNCS 4137, August 27-30, 2006. BPL Project. (Citations 26)

[9] Thomas Troels Hildebrandt and Sibylle Fröschle. *On Plain and Hereditary History-preserving Bisimulation.* In Proceedings of MFCS'99, LNCS 1672, pp. 354–365, 1999. (Citations 22)

[10] M. Bundgaard, A. J. Glenstrup, T. Hildebrandt, E. Højsgaard, H. Niss. *Formalizing Higher-order Mobile Embedded Business Processes with Binding Bigraphs*, 10th International Conference on Coordination Models and Languages, Oslo, June, 2008. (Citations 21)

Selected Invited Research Presentations:

- *RSVP: Live Sessions with Responses*, Invited Talk at 1st International Workshop on Behavioural Types, Rome, Italy, January 22, 2013

- *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 evaluation, PhD thesis evaluation, Program Chairs, Committees and Refereeing

- External evaluator on national research grant applications in Canada (NSERC), France and Netherlands. In committees for PhD thesis evaluation in Paris l'Ecole Polytechnique, University of Cambridge, Aarhus, Aalborg and ITU Copenhagen. Program chair on EXPRESS'07 and EXPRESS'08 (International Workshop on Expressiveness in Concurrency).

- Program Committee member on international conferences and symposia: BPM 2013, BPM 2012, FHIES 2011, MFPS 2010, CONCUR 2009, COORDINATION 2009, TGC 2008, and several workshops including PLACES 2013, WS-FM 2011, PNSE'12-'13 and '10, 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, 3rd EATCS Workshop in the Foundations of Global Computing (2004), and Categorical Methods for Concurrency, Interaction and Mobility (2002-2004).

- 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.

Numbered list of Peer-reviewed Publications

[1] Thomas T. Hildebrandt and Vladimiro Sassone. *Comparing Transition Systems with Independence and Asynchronous Transition Systems.* In proceedings of CONCUR'96, LNCS 1119, pp. 84–97, 1996.

[2] Thomas T. Hildebrandt and Vladimiro Sassone. *Transition Systems with Independence and Multi-arcs.* In Proceedings of POMIV'96, DIMACS vol. 29, pp. 273-288, 1996.

[3] Thomas Troels Hildebrandt, Prakash Panangaden, and Glynn Winskel. *A Relational Model of Non-deterministic Dataflow.* In proceedings of CONCUR'98, LNCS 1466, pp. 613–628, September 1998.

[4] Thomas Troels Hildebrandt and Sibylle Fröschle. *On Plain and Hereditary History-preserving Bisimulation.* In Proceedings of MFCS'99, LNCS 1672, pp. 354–365, 1999.

[5] Thomas Troels Hildebrandt. *A Fully Abstract Presheaf Semantics of SCCS with Finite Delay.* In Proceedings of CTCS'99, Vol. 29, ENTCS, 1999.

[6] Thomas Troels Hildebrandt. *Categorical Models for Concurrency: Independence, Fairness and Dataflow.* Ph.D. Dissertation, Department of Computer Science, University of Aarhus, Denmark, October, 1999.

[7] Thomas Troels Hildebrandt. *A Generalised Kahn Principle for a Relational Semantics of Indeterminate Dataflow.* MFPS XVI, May, 2000. (ext. abstract)

[8] Thomas Troels Hildebrandt. *Categorical Models for Fairness: Completion vs Delay.* Proceedings of MFCSIT 2000, ENTCS 40, July, 2000. (ext. abstract)

[9] Jens Christian Godskesen, Thomas Hildebrandt, and Vladimiro Sassone. *An Overview of MR, a Calculus of Mobile Resources*, LICS, July, 2002 (short paper presentation).

[10] Jens Christian Godskesen, Thomas Hildebrandt, and Vladimiro Sassone. *A Calculus of Mobile Resources.* Proceedings of CONCUR 2002, LNCS 2421, 2002.

[11] Thomas Troels Hildebrandt. *Towards Categorical Models for Fairness: Fully Abstract Presheaf Semantics of SCCS with Finite Delay.* Journal of TCS, volume 294 (1/2), pp. 151-181, 2003.

[12] Thomas Troels Hildebrandt, Prakash Panangaden, and Glynn Winskel. *A Relational Model of Non-deterministic Dataflow.* Journal of MSCS, vol. 14, 2004.

[13] Jens Christian Godskesen, and Thomas T. Hildebrandt. *Copyability Types for Mobile Computing Resources.* International Workshop on Formal Methods and Security, Nanjing, China, May, 2004. (ext. abstract).

[14] Mikkel Bundgaard, Thomas Hildebrandt, and Jens Christian Godskesen *A CPS Encoding of Name-passing in Higher-order Mobile Embedded Resources.* EXPRESS'04, 11th International Workshop on Expressiveness in Concurrency, London, UK, August, 2004, pp 131-150, ENTCS, vol. 128, no. 2, 2005.

[15] 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.

[16] Thomas Hildebrandt and Jens Christian Godskesen *Extending Howe's method to early bisimulations for typed mobile embedded resources with local names*, Proceedings of the 25th Conference on Foundations of Software Technology and Theoretical Computer Science, International Institute of Information Technology Hyderabad, INDIA, December 15-18, pp 140-151, LNCS 382, 2005.

[17] Mikkel Bundgaard, Thomas Hildebrandt, and Jens Christian Godskesen *Semantics of Higher-order Mobile Embedded Resources with local names.* Nordic Workshop on Programming Theory (NWPT), DIKU, Copenhagen, Denmark, October 19-21, 2005.

[18] Mikkel Bundgaard and Thomas Hildebrandt *Bigraphical 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 154 (2), pp. 7-29.

[19] Lars Birkedal, Søren Debois, Ebbe Elsborg, Thomas Hildebrandt, Henning Niss, *Bigraphical Models of Context-aware Systems*, In Proceedings of International conference on Foundations of Software Sciences and Computation Structures (FoSSaCS), LNCS 3921, pp 187-201, Springer, Vienna, Austria, 2006.

[20] 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.

[21] L. Birkedal, M. Bundgaard, T.C. Damgaard, S. Debois, E. Elsborg, A.J. Glenstrup, T. Hildebrandt, R. Milner, H. Niss, *Bigraphical Programming Languages for Pervasive Computing.* Invited paper at 1st International Workshop on Combining Theory and Systems Building in Pervasive Computing, Dublin, May, 2006.

[22] L. Birkedal, S. Debois, T. Hildebrandt *Sortings for Reactive Systems.* 17th International Conference on Concurrency Theory, CONCUR 2006, Bonn, Germany, LNCS 4137, August 27-30, 2006.

[23] M. Bundgaard, T.Hildebrandt, and J. Chr. Godskesen. *A CPS Encoding of Name-Passing in Higher-Order Mobile Embedded Resources.* Journal of Theoretical Computer Science, 356(3):, pp 422-439, 2006.

[24] M. Bundgaard, T.Hildebrandt, and J. Chr. Godskesen. *Modelling the security of smart cards by hard and soft types for higher-order mobile embedded resources..* In Proceedings of SecCo'07, ENTCS, 194(1), pp 23-38, Elsevier, 2007.

[25] Mikkel Bundgaard, Arne J. Glenstrup, Thomas Hildebrandt, Espen Højsgaard, Henning Niss. *Formalizing Higher-order Mobile Embedded Business Processes with Binding Bigraphs*, 10th International Conference on Coordination Models and Languages, Oslo, June, 2008.

[26] Mikkel Bundgaard, Thomas Hildebrandt, Espen Højsgaard. *Seamlessly Distributed & Mobile Workflow or: The right processes at the right places*, Workshop on Programming Language Approaches to Concurrency and Communication-cEntric Software (PLACES), Oslo, June, 2008.

[27] L. Birkedal, S. Debois, T. Hildebrandt *On the Construction of Sortings for Reactive Systems.* 19th International Conference on Concurrency Theory,

CONCUR 2008, Toronto, Canada, August, 2008.

[28] Karen Marie Lyng, Thomas Hildebrandt, Raghava Rao Mukkamala. *From Paper Based Clinical Practice Guidelines to Declarative Workflow Management*, 2nd International Workshop on Process-oriented information systems in healthcare (ProHealth 08), Milan, September, 2008.

[29] Raghava Rao Mukkamala, Thomas Hildebrandt, Janus Boris Tøth. *Resultmaker Online Consultant: From Declarative Workflow Management in Practice to LTL*, First International Workshop on Dynamic and Declarative Business Processes (DDBP), Munich, September, 2008.

[30] Ebbe Elsborg, Thomas T. Hildebrandt, and Davide Sangiorgi. *Type Systems for Bigraphs* In Proceedings of the 4th International Symposium on Trustworthy Global Computing (TGC'08). LNCS 5474, Springer-Verlag, 2009. (Full version containing full proofs is available as an ITU technical report.)

[31] L. Birkedal, S. Debois, T. Hildebrandt *Games and Higher-Order Linear Dataflows.* Games for Logic and Programming Languages IV, (affiliated to ETAPS 2009), 28-29 March 2009, York, United Kingdom.

[32] Thomas Hildebrandt and Hugo A. Lopez. *Types for Secure Pattern Matching with Local Knowledge in Universal Concurrent Constraint Programming* Proceedings of the 25th International Conference on Logic Programming (ICLP 2009), Pasadena, California, USA July 14-17, 2009.

[33] Jørgen Staunstrup, Frank Tung, Yu Lian, Li Weiping, Lin Huiping, Chu Weijie, John Paulin Hansen, Arne Glenstrup, and Thomas Hildebrandt. *Services in Context* Proceedings of the 2009 International Conference on Service Science (ICSS 2009), Beijing, China, May 14-15, 2009.

[34] Tim Hallwyl, Fritz Henglein, and Thomas Hildebrandt. *A Standarddriven Implementaion of WS-BPEL 2.0.* Proceedings of the 25th Symposium On Applied Computing, Sierre, Switzerland, March 22- 26, 2010.

[35] Marco Carbone, Thomas Hildebrandt, and Hugo A. Lopez. *Towards a Modal Logic for the Global Calculus* Pre-proceedings of PLACES 2010, Paphos, Cyprus, March, 2010.

[36] Thomas Hildebrandt, and Raghava Rao Mukkamala. *Distributed Dynamic Condition Response Structures* Pre-proceedings of PLACES 2010, Paphos, Cyprus, March, 2010.

[37] Thomas Hildebrandt, and Raghava Rao Mukkamala. *From Dynamic Condition Response Structures to Buchi Automata* Proceedings of the IEEE International Symposium on Theoretical Aspects of Software Engineering (TASE 2010), August 24 - 27, 2010, Taipei, Taiwan, ROC

[38] David R. Christiansen, Marco Carbone, and Thomas Hildebrandt. *Formal Semantics and Implementation of BPMN 2.0 Inclusive Gateways* Proceedings of Web Services and Formal Methods (WS-FM10). Hoboken, New Jersey, USA, September 2010

[39] Thomas Hildebrandt, Raghava Rao Mukkamala and Tijs Slaats. *Nested Dynamic Condition Response Graphs* In Proceedings of 4th International Conference on Fundamentals of Software Engineering (FSEN'11), April 20-22, 2011, Tehran, Iran

[40] Gian Perrone, Søren Debois, Thomas Hildebrandt. *Bigraphical Refinement*, In Refine '11: Proceedings of the 2011 International Refinement Workshop EPTCS 55, 2011, pp. 20-36, doi:10.4204/EPTCS.55.2 Arxiv preprint arXiv:1106.4091, 2011

[41] Thomas Hildebrandt, Rao R Mukkamala, Tijs Slaats. *Declarative modelling and safe distribution of healthcare workflows.* In Proceedings of 1st International Symposium on Foundations of Health Information Engineering and Systems, FHIES 2011, South Africa, 2011

[42] Thomas Hildebrandt, Rao R Mukkamala, Tijs Slaats. *Designing a cross-organizational case management system using dynamic condition response graphs*, Enterprise Distributed Object Computing Conference (EDOC), 15th IEEE International conference, pp. 161-170, 2011

[43] Thomas Hildebrandt, Rao R Mukkamala. *Declarative event-based workflow as distributed dynamic condition response graphs.* Arxiv preprint arXiv:1110.4161, 2011

[44] Marco Carbone, Davide Grohmann, Thomas T Hildebrandt, Hugo A Lopez. *A logic for choreographies*, Arxiv preprint arXiv:1110.4159, 2011

[45] Marco Carbone, Thomas Hildebrandt, Hugo A Lopez. *Refinement for Open Mixed Trees*, Nordic Workshop on Programming Theory, 2011

[46] Søren Debois, Thomas Hildebrandt, Rao R Mukkamala, Francesco Zanitti. *Towards a Programming Language for Declarative Event-based Context-sensitive Reactive Services*, Nordic Workshop on Programming Theory, 2011

[47] Gian Perrone, Søren Debois, Thomas T Hildebrandt. *A Model Checker for Bigraphs*, Software Verification and Testing Track at the 27th ACM Symposium On Applied Computing, Riva del Garda (Trento), Italy, March 26-30, 2012

[48] Marco Carbone, Thomas Hildebrandt, Hugo A. Lopez, Gian Perrone, and Andrzej Wasowski. *Refinement for Transition Systems with Responses*, In proceedings of 4th International Workshop on Foundations of Interface Technologies (FIT 2012), Satellite Workshop at ETAPS 2012 Tallinn, Estonia, March 25, 2012

[49] Alexander Faithfull, Gian Perrone, Thomas T Hildebrandt. *Big Red: A Development Environment for Bigraphs.*, Fourth International Workshop on Graph Computation Models Bremen, Germany, 28-29 September, 2012

[50] Wusheng Wang, Gian Perrone and Thomas Hildebrandt. *Petri Nets in Bigraphs Revisited*, Nordic Workshop on Programming Theory, Bergen, Norway, Oct 31-Nov 2nd, 2012

[51] Thomas T. Hildebrandt, Raghava Rao Mukkamala, Tijs Slaats and Francesco Zanitti. *Contracts for Cross-organizational Workflows as Timed Dynamic Condition Response Graphs.* To appear in Journal of Logic and Algebraic Programming Special issue on Contract Oriented Software

[52] A. S. Henriksen, L. Nielsen, T. Hildebrandt, N. Yoshida and F. Henglein. *Trustworthy Pervasive Healthcare Services via Multi-party Session Types.* In Pre-proceedings of 2nd International Symposium on Foundations of Health Information Engineering and Systems, FHIES 2012, Paris, France, 2012

[53] Thomas T. Hildebrandt, Raghava Rao Mukkamala, Tijs Slaats and Francesco Zanitti. *Modular Context-Sensitive and Aspect-Oriented Processes with Dy-*

namic Condition Response Graphs. To appear in Proceedings of Foundations of Aspect-Oriented Languages workshop (FOAL 2013), Fukuoka, Japan, 2013.

Technical Reports, etc.

[1] Thomas Troels Hildebrandt and Vladimiro Sassone. *Transition systems with independence and multi-arcs.* BRICS Report RS-97-10, Daimi, University of Aarhus, 1997. Full version of paper in proceedings of POMIV'96, DIMACS vol. 29, pp. 273-288.

[2] Thomas Troels Hildebrandt. *Extensions of independence models.* Progress report (Masters Thesis), May 1997.

[3] Thomas Troels Hildebrandt, Prakash Panangaden, and Glynn Winskel. *Relational semantics of non-deterministic dataflow.* BRICS Report RS-97-36, Department of Computer Science, University of Aarhus, December 1997. 21 pp.

[4] Thomas Troels Hildebrandt and Sibylle Fröschle. *On plain and hereditary history-preserving bisimulation.* BRICS Report, RS-99-04, 1999.

[5] Jens Chr. Godskesen, Thomas Hildebrandt and Søren Eduard Jacobsen, *An Implementation of the MR calculus*, ITU-TR-2002-14, 2002

[6] Jens Chr. Godskesen, Thomas Hildebrandt and Vladimiro Sassone, *A calculus of mobile resources*, ITU-TR-2002-16, 2002.

[7] Thomas Hildebrandt, Jens Chr. Godskesen, Mikkel Bundgaard, *Bisimulation Congruences for Homer - a Calculus of Higher Order Mobile Embedded Resources'*, ITU-TR-2004-52, 2004

[8] Thomas Hildebrandt and Jacob W. Winther, *Bigraphs and (Reactive) XML - an XML-centric model of computation*, ITU-TR-2005-56, 2005

[9] Thomas Hildebrandt, Henning Niss, Martin Olsen and Jacob W. Winther, *Distributed Reactive XML: an XML-centric coordination middleware*, ITU-TR-2005-62, 2005

[10] Martin Olsen, Jacob W. Winther, Henning Niss and Thomas Hildebrandt, *Reactive XML - a peer-to-peer middleware for mobile context-dependent coordination*, poster at 7th International Conference on Coordination Models and Languages (COORDINATION), 2005.
Available at www.itu.dk/people/hilde/Papers/ReactiveXMLCOORD05.pdf

[11] Mikkel Bundgaard and Thomas Hildebrandt, *Bigraphical Semantics of Higher-Order Mobile Embedded Resources with Local Names*, ITU-TR-2005-70, 2005

[12] Lars Birkedal, Søren Debois, Ebbe Elsborg, Thomas Hildebrandt, Henning Niss, *Bigraphical Models of Context-aware Systems*, ITU-TR-2005-74, 2005

[13] L. Birkedal, S. Debois, T. Hildebrandt *Sortings for Reactive Systems.* ITU-TR-2006-84, 2006.

[14] Thomas Hildebrandt, Henning Niss and Martin Olsen, *Business Process Execution with Bigraphs and Reactive XML*, ITU-TR-2006-85, 2006.

[15] Thomas Hildebrandt, Henning Niss, Mikkel Bundgaard, Kjeld Schmidt and Thomas Jensen (MDCC), *Computer Supported Mobile Adaptive Business Processes: Position paper on the CosmoBiz research project (2007-2010)*, 1st Informal Workshop on Formal Models for Business Process Execution, Service Oriented Computing and CSCW, ITU, October, 2007.

[16] Mikkel Bundgaard, Thomas Hildebrandt, and Jens Chr. Godskesen. *Typing Linear and Non-Linear Higher-Order Mobile Embedded Resources with Local Names.* Technical report TR-2007-97, IT University of Copenhagen, May 2007.

[17] Roberto Amadio, Thomas Hildebrandt (eds). *Preliminary Proceedings of 14th International Workshop on Expressiveness in Concurrency (EXPRESS'07)*, TR-2007-100, IT University of Copenhagen, 2007.

[18] Mikkel Bundgaard, Arne John Glenstrup, Thomas Hildebrandt, Espen Hjsgaard, 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.

[19] Mikkel Bundgaard , Jens Chr. Godskesen, and Thomas Hildebrandt. *On Encoding the Pi-calculus in Higher-Order Calculi*, TR-2008-106, IT University of Copenhagen, 2008.

[20] Daniele Gorla and Thomas Hildebrandt (eds). *Preliminary Proceedings of the 15th International Workshop on Expressiveness in Concurrency (EXPRESS'08)*, TR-2008-108, IT University of Copenhagen, 2008.

[21] Ebbe Elsborg, Thomas T. Hildebrandt, and Davide Sangiorgi. *Type Systems for Bigraphs.* Technical Report TR-2008-110, IT University of Copenhagen, October 2008. ISBN: 9788779491847.

[22] Lars Birkedal, Mikkel Bundgaard, Søren Debois, Davide Grohmann, Thomas Hildebrandt. *Higher-order Contexts via Games and the Int-construction.* Technical report TR-2009-117 in IT University Technical Report Series, January 2009.

[23] Thomas Hildebrandt and Daniele Gorla (guest editors) *Journal of MSCS, Special Issue: Expressiveness in Concurrency 2008* vol. 20, Nr 1, February 2010

[24] Thomas Hildebrandt, *Review of "Robin Milner. The Space and Motion of Communicating Agents. Cambridge University Press, Uk, 2009, 212pp.".* The Bulletin of Symbolic Logic, 2010

[25] *Contracts as Dynamic Condition Response Graphs*, (Abstract of Invited Talk), In proceedings at Fifth Workshop on Formal Languages and Analysis of Contract-Oriented Software, Malaga, Spain, EPTCS 68, Sep, 2011

Popular Science Communication and Appearances in Press

1. *Fra strategi til handling - hvordan digitaliserer man uforudsigelige processer?.* Inviteret foredrag ved Temadag om Digital Forvaltning i et strategisk perspektiv for region Syd, Midt og Nord, Vejle, 26. Oktober 2012

2. *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.

3. *Fleksible sundhedsproesser.* Foredrag ved Infinit temadag om sammenhængende patientforløb, sundhedsprocesser og it, København, April, 2012

4. *Fra automatiserede arbejdsgange til it-støttet samarbejde.* Inviteret foredag ved VidenDanmark seminar om Digitalisering og procesoptimering - Fokus på digitalisering og procesorientering af videnarbejde og sagsbehandling?, Symbion Science Park, 25. januar, 2012

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