

January 27, 2012

Curriculum Vitae

ANDERS MØLLER

Born: January 16, 1976
Citizenship: Danish
Marital status: married
Children: two daughters

Address

Office: Department of Computer Science
Aarhus University
IT-parken, Aabogade 34
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Position

since January 2006 Associate Professor (tenured, aka. "lektor")
at Department of Computer Science, Aarhus University

since January 2011 Manager of CASA - Center for Advanced Software Analysis
<http://cs.au.dk/CASA/>

Research Interests

My research is in the intersection of theory and practice of programming languages, with a particular focus on program analysis, XML and Web technology, and on applications of mathematical logics and formal models.

Degrees

June 2000 M.Sc. Computer Science (Cand. Scient., Datalogi), Aarhus University
September 2002 Ph.D., Aarhus University

Grants and Awards

August 1998–July 2002 Ph.D. scholarship from Aarhus University and BRICS / The Danish National Research Foundation
January 2003–December 2005 grant from the Carlsberg Foundation (1.4 M DKK)
Project title: “Verification of software systems”
July 2007 IBM Faculty Award (\$30,000)
January 2008–June 2012 grant from The Danish Research Council for Technology and Production Sciences, FTP (3.7 M DKK)
Project title: “Languages and Analyses for Web Programming”
December 2009 gift from Google (\$90,000)
May 2010 research contract with Fujitsu Laboratories of America (\$15,000)
July 2010 Google Research Award (\$65,000)
December 2010 IBM Faculty Award (\$20,000)
August 2011–July 2015 grant from The Danish Research Council for Technology and Production Sciences, FTP (4.8 M DKK)
Project title: “Tools for Rich Internet Applications”
August 2011–July 2015 Sapere Aude, DFF-Forskningsleder 2010
The Danish Council for Independent Research (7.9 M DKK)
Project title: “Static Analysis for Dynamic Languages”

Stays Abroad

June–August 1998 Summer intern at AT&T Labs Research, Florham Park, New Jersey
July–December 2000 Visiting Prof. Alex Aiken’s group at University of California, Berkeley
October–November 2010 Visiting Prof. Tom Reps’ group at University of Wisconsin–Madison

Workshop Organization, Program Committee Work, etc.

- PC member of European Symposium on Programming (ESOP) 2005
- PC member of International Workshop on Programming Language Technologies for XML (PLAN-X) 2005, 2007, and 2009

- General Chair of International Workshop on Programming Language Technologies for XML (PLAN-X) 2006
- PC member of International Workshop on the Web and Databases (WebDB) 2007
- PC member of International Conference on Compiler Construction (CC) 2008
- PC member of Workshop on Testing, Analysis and Verification of Web Services and Applications (TAV-WEB) 2008
- Member of the Management Committee of EU COST Action IC0701: Formal Verification of Object-Oriented Software, 2008-2011
- PC member of International Static Analysis Symposium (SAS) 2009
- PC member of Workshop on Analysis and Programming Languages for Web Applications and Cloud Applications (APLWACA) 2010
- PC member of International Conference on Formal Verification of Object-Oriented Software (FoVeOOS) 2010 and 2011
- Member of IFIP Working Group 2.4, Software Implementation Technology, since 2010
- PC member of Symposium on Principles of Programming Languages (POPL) 2011
- PC member of International Conference on Data Engineering (ICDE) 2011
- ERC member of Conference on Programming Language Design and Implementation (PLDI) 2011
- PC member of International Conference on the Principles and Practice of Programming in Java (PPPJ) 2011
- PC member of Workshop on Program Analysis for Software Tools and Engineering (PASTE) 2011
- PC member of International Symposium on Engineering Secure Software and Systems (ESSoS) 2012
- ERC member of Symposium on Principles of Database Systems (PODS) 2012
- PC member of European Symposium on Programming (ESOP) 2012
- PC member of Conference on Programming Language Design and Implementation (PLDI) 2012
- PC member of International Conference on the Principles and Practice of Programming in Java (PPPJ) 2012
- PC member of International Static Analysis Symposium (SAS) 2012

External Thesis Committees

- Marcus Nilsson, Ph.D., University of Uppsala, March 2005

Talks at Seminars / Workshops / Meetings / Summer Schools (excluding conferences)

January 1999	Technical University of Denmark
May 1999	University of Aalborg
June 2000	Meeting on XML/SGML based Interchange Formats for Petri Nets, 21st International Conference on Application and Theory of Petri Nets
November 2000	University of California, Berkeley
March 2001	IT University of Copenhagen
June 2001	AT&T Labs Research, New Jersey
November 2002	IT University of Copenhagen
March 2003	LinuxForum 2003
June 2003	Dresden University of Technology
September 2003	Workshop on Verification of Infinite-State Systems, INFINITY 2003
February 2005	University of Aalborg
March 2005	University of Uppsala
October 2006	University of Aalborg
January 2007	IT University of Copenhagen
May 2007	IFIP WG 2.4 meeting, Lake Arrowhead, California
July 2007	IBM T.J. Watson, New York
July 2007	University of Oregon, Eugene, Summer School on Language-Based Techniques for Integrating with the External World
August 2007	Estonian Summer School in Computer and System Science, ESSCaSS 2007
December 2007	Softwareudvikling-på-tværs 2007, Danish Technological Institute, Copenhagen
January 2008	University of California, Davis
June 2008	COST Action IC0701 meeting, Chalmers, Sweden
January 2009	UNF, Aalborg
May 2009	IFIP WG 2.4 meeting, Fort Worden, Washington
June 2009	COST Action IC0701 meeting, Lisbon, Portugal
August 2009	IBM T.J. Watson, New York
August 2009	Danish Static Analysis Symposium, DANSAS 2009
October 2009	University of Aalborg
January 2010	IFIP WG 2.4 meeting, Berg en Terblijt, Netherlands
March 2010	Microsoft Research, Redmond, Washington
October 2010	POPL PC workshop, University of Maryland, College Park
October 2010	University of Wisconsin-Madison
November 2010	Google, New York
December 2010	University of Copenhagen
June 2011	Microsoft Research, Redmond, Washington
September 2011	WebQUeST 2011, Szeged, Hungary
September 2011	TAPAS 2011, Venice, Italy
September 2011	IFIP WG 2.4 meeting, Cape May, New Jersey

Teaching

Lecturing at Aarhus University:

Spring 2000	<i>XML and Related Technologies</i> (28 students)
Fall 2002	<i>Interactive Web Services</i> (56 students)
Fall 2003 (2nd quarter)	<i>Software Verification</i> (20 students)
Spring 2004 (3rd quarter)	<i>Web Technology</i> (125 students)
Spring 2004 (3rd quarter)	<i>Regularity and Automata</i> (178 students)

Spring 2004 (4th quarter)	<i>Static Analysis</i> (two weeks, 11 students)
Fall 2004 (2nd quarter)	<i>Advanced XML</i> (49 students)
Spring 2005 (3rd quarter)	<i>Web Technology</i> (114 students)
Spring 2005 (4th quarter)	<i>Regularity and Automata</i> (97 students)
Fall 2005 (1st quarter)	<i>Computer Science in Perspective – Automatic Validation of HTML Input Fields</i> (one week, 104 students)
Spring 2006 (3rd quarter)	<i>Web Technology</i> (84 students)
Spring 2006 (4th quarter)	<i>Programming Languages</i> (two weeks, 80 students)
Spring 2006 (4th quarter)	<i>Regularity and Automata</i> (125 students)
Fall 2006 (1st quarter)	<i>Computer Science in Perspective – Automatic Validation of HTML Input Fields</i> (one week, 75 students)
Fall 2006 (2nd quarter)	<i>Advanced Web Technology</i> (78 students)
Spring 2007 (3rd quarter)	<i>Web Technology</i> (139 students)
Spring 2007 (4th quarter)	<i>Software Verification</i> (13 students)
Spring 2007 (4th quarter)	<i>Regularity and Automata</i> (115 students)
Fall 2007 (1st quarter)	<i>Computer Science in Perspective – Formal Languages and Web Technology</i> (one week, 76 students)
Fall 2007 (2nd quarter)	<i>Advanced Web Technology</i> (33 students)
Spring 2008 (4th quarter)	<i>Software Verification</i> (14 students)
Spring 2008 (4th quarter)	<i>Regularity and Automata</i> (103 students)
Fall 2008 (1st quarter)	<i>Computer Science in Perspective – Formal Languages and Web Technology</i> (one week, 110 students)
Fall 2008 (1st quarter)	<i>Concurrency</i> (158 students)
Fall 2008 (2nd quarter)	<i>Advanced Web Technology</i> (34 students)
Spring 2009 (4th quarter)	<i>Regularity and Automata</i> (129 students)
Fall 2009 (1st quarter)	<i>Computer Science in Perspective – Formal Languages and Web Technology</i> (one week, 110 students)
Fall 2009 (1st quarter)	<i>Concurrency</i> (107 students)
Fall 2009 (1st quarter)	<i>Databases</i> (three weeks, 78 students)
Fall 2009 (2nd quarter)	<i>Advanced Web Technology</i> (23 students)
Spring 2010 (3rd quarter)	<i>Static Analysis</i> (25 students)
Spring 2010 (4th quarter)	<i>Software Verification</i> (15 students)
Spring 2010 (4th quarter)	<i>Regularity and Automata</i> (110 students)
Fall 2010 (1st quarter)	<i>Concurrency</i> (118 students)
Fall 2010 (1st quarter)	<i>Computer Science in Perspective – Formal Languages and Web Technology</i> (one week, 112 students)
Fall 2010 (1st quarter)	<i>Server-based Web Programming</i> (68 students)
Fall 2010 (2nd quarter)	<i>Client-based Web Programming</i> (76 students)
Spring 2011 (3rd quarter)	<i>Web Technology</i> (140 students)
Spring 2011 (4th quarter)	<i>Regularity and Automata</i> (120 students)
Fall 2011 (1st quarter)	<i>Concurrency</i> (97 students)
Fall 2011 (1st quarter)	<i>Server-based Web Programming</i> (50 students)
Fall 2011 (2nd quarter)	<i>Client-based Web Programming</i> (45 students)
Spring 2012 (3rd quarter)	<i>Static Analysis</i> (16 students)
Spring 2012 (4th quarter)	<i>Software Verification</i> (10 students)
Spring 2012 (4th quarter)	<i>Regularity and Automata</i> (173 students)

External courses:

February 2000	One-day course on XML for EOS
May 2000	Three-day course on XML for Datamatikerlærerforeningen
May 2000	Two-day course on XML for ICL
June 2000	Two-day course on XML for Kommunedata
November 2001	Three-day course on XML for Datamatikerlærerforeningen

April 2002	Three-day course on XML for JAOO Academy
April 2002	Two-day course on Interactive Web Services for Datamatikerlærerforeningen
August-October 2003	Seven-week course (7·3 hours) on XML for CCI Europe
April 2004	Two-day workshop on XML for the DINA Research School
June 2004	Two-day course on XML for PostDanmark / Iocore
Fall 2005, 2006, 2007	Course on Internet technologies at Aalborg University
Fall 2006, 2007, 2008, 2009, 2010, 2011	Course on programming paradigms at Aalborg University
May 2007	Three-day course on XML for Danish Technological Institute
September 2008	Two-day course on XML for Bestseller / Trifork

Theses Advised

- Christian Kirkegaard[†] (Cand. Scient. Datalogi 2003, **Ph.D.** 2006):
Dynamic XML Processing with Static Validation
- Henning Böttger (Cand. Scient. Datalogi, 2004):
Improving Cooperation Between Programmers and HTML Designers Using Contracts
- Gunner Olesen (Master IT, 2004):
System Integration With Web Services on the Business Intranet
- Torben Ruby (Cand. Scient. Datalogi 2004):
Specification, Implementation, and Verification of Web Services
- Mads Østerby Olesen[†] (Cand. Scient. Datalogi 2004):
Static Validation of XSLT
- Alexander Harrow (Cand. IT, 2005):
XML and Relational Databases – A Survey
- Martin Mosegaard Jensen (Cand. Scient. Datalogi, 2006):
Understanding Parametric Shape Analysis
- Janus Dam Nielsen (Cand. Scient. Datalogi, 2006):
Relations between Schema Languages for XML
- Søren Kuula[†] (Cand. Scient. Datalogi, 2006):
Practical Type-Safe XSLT 2.0 Stylesheet Authoring
- Michael Ustrup[†] (Cand. Scient. Datalogi, 2006):
Coding Conventions
- Colin Samuel Rosenthal[†] (Cand. IT, 2007):
Contract-Based Web Development
- Henrik Thuesen (Cand. Scient. Datalogi, 2007):
Type Checking for JavaScript
- Jonas Krarup Dam (Cand. Scient. Datalogi, 2007):
Static Analysis for Java Servlets and JSP
- Rasmus Nygaard Andersen (Cand. Scient. Datalogi, 2007):
Web Application Frameworks
- Rune Simonsen and Rasmus Kromann-Larsen (Cand. Scient. Datalogi, 2007):
Analyzing JavaScript Programs
- Bárður Háskor (Cand. Scient. Datalogi, 2007):
Analysis of String Expressions

- Anders Jacobsen (Cand. Scient. Datalogi, 2007):
Analysis of SAX Applications
- Sune Koch Hansen (Cand. Scient. Datalogi, 2008):
Call-Graph Analysis for JavaScript
- Kasper Hansen (Cand. Polyt., 2008):
Web Service Standards
- Lea Troels Møller Pedersen (Cand. Scient. Datalogi, 2009):
Program Slicing for String Analysis
- Ronny Rundberg Bruus (Cand. Scient. Datalogi, 2009):
Safety Analysis for Web Applications
- Simon Corfix Lykke (Cand. Scient. Datalogi, 2010):
Streaming XSLT
- Jakob Benjamin Boisen Juhl (Cand. Scient. Datalogi, 2010):
Scripting in OpenEngine
- Smári Vidarsson Waage (Cand. Scient. Datalogi, 2010):
A Study of Trace-Based Compilation
- Kristian Klüver Jensen (Cand. Scient. Datalogi, 2010):
Type Checking SQL/XML
- Anders Viskum (Cand. Scient. Datalogi, 2010):
Web Application Testing
- Peter Bugge Andersen (Dipl. IT, 2010):
Caching in JEE Backends
- Jesper Ilsøe Nielsen[†] (Cand. Scient. Datalogi, 2011):
Engineering Sub-Cubic Flow Analysis
- Valerio Bruno (M.Sc. CS, 2011):
Concolic Testing with PALE
- Martin Castberg Thuesen (Cand. Scient. Datalogi, 2011):
Contracts for jQuery
- Alexander Bjerremand Hansen[†] (Cand. Scient. Datalogi, 2011):
Exception Analysis in MLton
- Casper Bach Poulsen (Cand. Scient. Datalogi, 2011):
Methods and Tools for Automated Testing of JavaScript Web Applications
- Mathias Schwarz (Cand. Scient. Datalogi 2010, **Ph.D.** 2008–2012)
- Simon Holm Jensen (Cand. Scient. Datalogi 2010, **Ph.D.** 2008–2012)
- Magnus Madsen (**Ph.D.**, 2010–2014)
- Asger Feldthaus (**Ph.D.**, 2010–2014)
- Esben Andreasen (**Ph.D.**, 2011–2015)
- Casper Svenning Jensen (**Ph.D.**, 2011–2014)

[†]Project advisor or co-advisor

Postdocs

since August 2011

Peter A. Jonsson

Long Term Visitors

August–September 2011 Prof. Zhendong Su (UC Davis)

Administrative Duties at the Dept. of CS, Aarhus University

- Chairman of the Computer Science program committee at the Graduate School of Science and Technology (GSST, formerly AGSoS), since April 2011
- Member of the Faculty of Science and Technology PhD Committee, February 2012 – 2015
- Member of the Dept. of CS PhD Committee, since July 2007
- Member of the Teaching Committee, since November 2006
- Member of the Seminar Committee, since November 2006
- Chairman of PhD evaluation committees for
 - Michael Westergaard
 - Michael Østergaard Pedersen
 - Kristian Bisgaard Lassen
 - Søren Besenbacher
 - Doina Bucur
 - Miroslava Sotáková
 - Simon Tjell
 - Janus Dam Nielsen
 - Rune Thorbek
 - Karsten Noe
 - Clemens Nylandsted Klokrose
 - Kristian Ellebæk Kjær
 - Martin Geisler
 - Karl Klose
 - Pooya Davoodi
 - Morten Bohøj
 - Morten Tranberg Hansen
 - Johnni Winther

Selected Software Packages

- MONA (<http://www.brics.dk/mona/>)
decision procedure for monadic second-order logics, developed with Nils Klarlund
- PALE (<http://www.brics.dk/PALE/>)
extension of MONA for program verification with Pointer Assertion Logic
- JWIG (<http://www.brics.dk/JWIG/>)
program analyzer and runtime system for the JWIG programming language, developed with Aske Simon Christensen and Mathias Schwarz
- XACT (<http://www.brics.dk/Xact/>)
Java-based XML transformation library and program analyzer, developed with Aske Simon Christensen, Christian Kirkegaard and Asger Feldthaus

- COURSEADMIN (<http://www.brics.dk/~amoeller/CourseAdmin/>)
a course administration system written in Jwig
developed with Mathias Schwarz
- dk.brics.automaton (<http://www.brics.dk/automaton/>)
DFA/NFA and regular expression operations
- dk.brics.grammar (<http://www.brics.dk/grammar/>)
context-free grammar parsing and ambiguity analysis
- dk.brics.schematools (<http://www.brics.dk/schematools/>)
tool for working with XML graphs, XML Schema, and Restricted RELAX NG,
developed with Christian Kirkegaard
- JSA (<http://www.brics.dk/JSA/>)
Java String Analyzer tool, developed with Aske Simon Christensen,
Bárdur Háskor and Asger Feldthaus
- TAJs (<http://www.brics.dk/TAJS/>)
Type Analyzer for JavaScript, developed with Simon Holm Jensen,
Peter Thiemann and Magnus Madsen

Refereeing (as external reviewer)

Journals:

- Data & Knowledge Engineering (DKE)
- Higher-Order and Symbolic Computation (HOSC)
- Information Systems (IS)
- Internet Computing (IC)
- IEICE Transactions on Information and Systems (IEICE)
- International Journal of Foundations of Computer Science (IJFCS)
- Journal of Functional Programming (JFP)
- Journal of Logic and Algebraic Programming (JLAP)
- Journal of Systems and Software (JSS)
- Science of Computer Programming (SCP)
- Software Practice and Experience (SP&E)
- International Journal on Software Tools for Technology Transfer (STTT)
- Transactions on Computational Logic (TOCL)
- Transactions on Database Systems (TODS)
- Transactions on Programming Languages and Systems (TOPLAS)
- Transactions on Software Engineering and Methodology (TOSEM)
- Transactions on Software Engineering (TSE)
- World Wide Web Journal (WWWJ)

Conferences/workshops:

- International Conference on Computer Aided Verification (CAV)
- Computability in Europe (CiE)

- International Conference on Data Base Programming Languages (DBPL)
- Dynamic Languages Symposium (DLS)
- European Conference on Object-Oriented Programming (ECOOP)
- European Symposium on Programming (ESOP)
- Formal Methods (FM)
- Foundations of Software Science and Computation Structures (FOSSACS)
- International Colloquium on Automata, Languages and Programming (ICALP)
- International Conference on Functional Programming (ICFP)
- International Symposium on Mathematical Foundations of Computer Science (MFCS)
- Object-Oriented Programming, Systems, Languages and Applications (OOPSLA)
- Workshop on Program Analysis for Software Tools and Engineering (PASTE)
- International Workshop on Programming Language Technologies for XML (PLAN-X)
- Conference on Programming Language Design and Implementation (PLDI)
- Symposium on Principles of Database Systems (PODS)
- Symposium on Principles of Programming Languages (POPL)
- International Static Analysis Symposium (SAS)
- International Workshop on Tools and Algorithms for Construction and Analysis of Systems (TACAS)
- International Conference on Verification, Model Checking and Abstract Interpretation (VMCAI)

Other reviewing:

- ACM SIGPLAN Dissertation Award
- Austrian Science Fund (FWF)
- EU FP7
- Swiss National Science Foundation (SNSF)
- The Netherlands Organisation for Scientific Research (NWO)
- City University of Hong Kong
- Natural Sciences and Engineering, Research Council of Canada (NSERC)
- Pearson Education

Publications

(All the publications have used alphabetical order of authors.)

Theses

- [1] “**MONA, DSD, and <bigwig>**,” Ph.D. progress report (equivalent to master’s thesis), June 2000.
- [2] “**Program Verification with Monadic Second-Order Logic & Languages for Web Service Development**,” Ph.D. dissertation, Department of Computer Science, Aarhus University, June 2002. xvi+337 pp.

Books

- [3] **“An Introduction to XML and Web Technologies,”** with Michael I. Schwartzbach, Addison-Wesley, January 2006, 568 pp, ISBN: 0 321 26966 7.

Refereed Journal Publications

- [4] **“A Runtime System for Interactive Web Services,”** with Claus Brabrand, Anders Sandholm, and Michael I. Schwartzbach, in *Computer Networks*, Vol. 31 No. 11–16: 1391–1401, Elsevier, 1999; also in *WWW8, Proc. 8th International World Wide Web Conference*, Elsevier, 1999.
- [5] **“PowerForms: Declarative Client-Side Form Field Validation,”** with Claus Brabrand, Mikkel Ricky, and Michael I. Schwartzbach, in *World Wide Web Journal*, Vol. 3, No. 4: 205–214, Baltzer Science Publishers, 2000.
- [6] **“MONA Implementation Secrets,”** with Nils Klarlund and Michael I. Schwartzbach, in *International Journal on Foundations of Computer Science*, Vol. 13, No. 4: 571–586, World Scientific, 2002; preliminary version in *CIAA’00, Proc. 5th International Conference on Implementation and Application of Automata*, LNCS 2088, Springer-Verlag, 2000.
- [7] **“The DSD Schema Language,”** with Nils Klarlund and Michael I. Schwartzbach, in *Automated Software Engineering*, Vol. 9, No. 3: 285–319, Kluwer, 2002; preliminary version in *FMSP’00, Proc. 3rd Workshop on Formal Methods in Software Practice: 101-111*, ACM, 2000.
- [8] **“The <bigwig> Project,”** with Claus Brabrand and Michael I. Schwartzbach, in *Transactions on Internet Technology*, Vol. 2, No. 2: 79–114, ACM, May 2002.
- [9] **“Language-Based Caching of Dynamically Generated HTML,”** with Claus Brabrand, Stefan Olesen, and Michael I. Schwartzbach, in *World Wide Web Journal*, Vol. 5, No. 4: 305–323, Kluwer, 2002.
- [10] **“Extending Java for High-Level Web Service Construction,”** with Aske Simon Christensen and Michael I. Schwartzbach, in *Transactions on Programming Languages and Systems*, Vol. 25, No. 6, 814–875. ACM, 2003.
- [11] **“Static Analysis of XML Transformations in Java,”** with Christian Kirkegaard and Michael I. Schwartzbach, in *Transactions on Software Engineering*, Vol. 30, No. 3, 181–192, IEEE, March 2004.
- [12] **“Contracts for Cooperation between Web Service Programmers and HTML Designers,”** with Henning Böttger and Michael I. Schwartzbach, in *Journal of Web Engineering*, Vol. 5, No. 1, 65–89, Rinton Press, 2006.
- [13] **“Static Validation of XSL Transformations,”** with Mads Østerby Olesen and Michael I. Schwartzbach, in *Transactions on Programming Languages and Systems*, Vol. 29, No. 4, ACM, 2007.
- [14] **“Dual Syntax for XML Languages,”** with Claus Brabrand and Michael I. Schwartzbach, in *Information Systems*, Vol. 33, No. 4, Elsevier, June 2008; preliminary version in *DBPL’05, Proc. 10th International Symposium on Database Programming Languages*, LNCS 3774, Springer-Verlag, 2005.
- [15] **“Analyzing Ambiguity of Context-Free Grammars,”** with Claus Brabrand and Robert Giegerich, in *Science of Computer Programming*, Vol. 75, No. 3, Elsevier, March 2010; preliminary version in *CIAA’07, Proc. 12th International Conference on Implementation and Application of Automata*, Springer-Verlag, 2007.

- [16] “XML Graphs in Program Analysis,” with Michael I. Schwartzbach, in *Science of Computer Programming*, Vol. 76. No. 6, Elsevier, June 2011; preliminary version invited paper in *PEPM’07, Proc. ACM SIGPLAN Workshop on Partial Evaluation and Program Manipulation*, 2007.

Other Refereed or Invited Publications (excluding journal versions)

- [17] “MONA 1.x: New Techniques for WS1S and WS2S” (tool paper), with Jacob Elgaard and Nils Klarlund, in *CAV’98, Proc. 10th International Conference on Computer-Aided Verification: 516–520*, LNCS 1427, Springer-Verlag, 1998.
- [16] “Compile-Time Debugging of C Programs Working on Trees,” with Jacob Elgaard and Michael I. Schwartzbach, in *ESOP’00, Proc. 9th European Symposium on Programming: 119–134*, LNCS 1782, Springer-Verlag, 2000.
- [19] “The Pointer Assertion Logic Engine,” with Michael I. Schwartzbach, in *PLDI’01, Proc. Conference on Programming Language Design and Implementation*, ACM, 2001.
- [20] “Static Validation of Dynamically Generated HTML,” with Claus Brabrand and Michael I. Schwartzbach, in *PASTE’01, Proc. Workshop on Program Analysis for Software Tools and Engineering*, ACM, 2001.
- [21] “Static Analysis for Dynamic XML,” with Aske Simon Christensen and Michael I. Schwartzbach; presented at *PLAN-X’02, Programming Language Technologies for XML*, October 2002; also in BRICS Report Series, RS-02-24, Department of Computer Science, Aarhus University, May 2002.
- [22] “Precise Analysis of String Expressions,” with Aske Simon Christensen and Michael I. Schwartzbach, in *SAS’03, Proc. 10th International Static Analysis Symposium: 1–18*, LNCS 2694, Springer-Verlag, 2003.
- [23] “A Runtime System for XML Transformations in Java,” with Aske Simon Christensen and Christian Kirkegaard, in *XSym’04, Proc. 2nd International XML Database Symposium: 143–157*, LNCS 3186, Springer-Verlag, 2004.
- [24] “Type Checking with XML Schema in XACT,” with Christian Kirkegaard, presented at *PLAN-X’06, Programming Language Technologies for XML*, January 2006; also in BRICS Report Series, RS-05-31, Department of Computer Science, Aarhus University, September 2005.
- [25] “The Design Space of Type Checkers for XML Transformation Languages” (invited paper), with Michael I. Schwartzbach, in *ICDT’05, Proc. 10th International Conference on Database Theory: 17–36*, LNCS 3363, Springer-Verlag, 2005.
- [26] “Static Analysis for Java Servlets and JSP,” with Christian Kirkegaard, in *SAS’06, Proc. 13th International Static Analysis Symposium*, LNCS 4134, Springer-Verlag, 2006. Full version available in BRICS Report Series, RS-06-10, Department of Computer Science, Aarhus University, June 2006.
- [27] “Static Analysis for Event-Based XML Processing,” presented at *PLAN-X’08, Programming Language Technologies for XML*, January 2008; also in BRICS Report Series, RS-08-01, Department of Computer Science, Aarhus University, January 2008.
- [28] “JWIG: Yet Another Framework for Maintainable and Secure Web Applications,” with Mathias Schwarz, in *WEBIST’09, Proc. 5th International Conference on Web Information Systems and Technologies*, 2009. Full version available in BRICS Report Series, RS-09-02, Department of Computer Science, Aarhus University, March 2009.

- [29] **“Type Analysis for JavaScript,”** with Simon Holm Jensen and Peter Thiemann, in *SAS’09, Proc. 16th International Static Analysis Symposium*: 238–255, LNCS 5673, Springer-Verlag, 2009.
- [30] **“Interprocedural Analysis with Lazy Propagation,”** with Simon Holm Jensen and Peter Thiemann, in *SAS’10, Proc. 17th International Static Analysis Symposium*, LNCS 6337, Springer-Verlag, 2010.
- [31] **“HTML Validation of Context-Free Languages,”** with Mathias Schwarz, in *FoSSaCS’11, Proc. 14th International Conference on Foundations of Software Science and Computation Structures*, LNCS 6604, Springer-Verlag, 2011.
- [32] **“A Framework for Automated Testing of JavaScript Web Applications,”** with Shay Artzi, Julian Dolby, Simon Holm Jensen, and Frank Tip, in *ICSE’11, Proc. 33rd International Conference on Software Engineering*, ACM, May 2011.
- [33] **“Modeling the HTML DOM and Browser API in Static Analysis of JavaScript Web Applications,”** with Simon Holm Jensen and Magnus Madsen, in *ESEC/FSE’11, Proc. 8th European Software Engineering Conference / ACM SIGSOFT International Symposium on Foundations of Software Engineering*, September 2011.
- [34] **“Tool-supported Refactoring for JavaScript,”** with Asger Feldthaus, Todd Millstein, Max Schäfer, and Frank Tip, in *OOPSLA’11, Proc. 26th ACM SIGPLAN Conference on Object-Oriented Programming, Systems, Languages, and Applications*, October 2011.
- [35] **“Automated Detection of Client-State Manipulation Vulnerabilities,”** with Mathias Schwarz, to appear in *ICSE’12, Proc. 34th International Conference on Software Engineering*, ACM, June 2012.

Dissemination

- [36] **“Verifikation af Softwaresystemer”** (in Danish), in *Carlsbergfondets Årsskrift*, 2005.

Other Publications

- [37] **“Document Structure Description 1.0,”** with Nils Klarlund and Michael I. Schwartzbach, in *BRICS Notes Series, NS-00-7*, Department of Computer Science, Aarhus University, December 2000. 40 pp.
- [38] **“MONA Version 1.4 User Manual,”** with Nils Klarlund, in *BRICS Notes Series, NS-01-1*, Department of Computer Science, Aarhus University, January 2001. 83 pp. Revision of BRICS NS-98-3.
- [39] **“The XML Revolution — Technologies for the future Web,”** with Michael I. Schwartzbach, in *BRICS Notes Series, NS-01-8*, Department of Computer Science, Aarhus University, December 2001. 186 pp. Revision of BRICS NS-00-8.
- [40] **“Interactive Web Services with Java,”** with Michael I. Schwartzbach, in *BRICS Notes Series, NS-02-1*, Department of Computer Science, Aarhus University, April 2002. 99 pp.
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