

Curriculum Vitae

Troels C. Damgaard

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Date of Birth	18th September, 1976.
Nationality	Danish.
Marital status	Engaged.
Private Address	Christianshavns Voldgade 21, 2.tv., 1424 Copenhagen K, Denmark.
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Current position	Ph.D. Fellow in the Programming, Logic, and Semantics group.
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Research Area

Formal semantics for and development of domain-specific languages and calculi, metalanguages and metamodelling; in particular, related to concurrency, mobility, distribution, security, and biomolecular modelling.

Current research: Research and development of bigraphical languages. Bigraphs is a rule-based framework (closely related to XML) for models and calculi with both a syntactical and visual representation.

Education

2002 - 2006	M.Sc. in Information Technology from the IT University of Copenhagen. Thesis title: Syntactic Theory for Bigraphs. (First part of 4+4 Ph.D.) Grade point average (weighted) ¹ : 11.4. Thesis grade ¹ : 13.
1998 - 2002	B.Sc. in Computer Science from Roskilde University. Grade point average (weighted) ¹ : 11.1.
1997 - 1998	Medicine studies at the University of Copenhagen.
Spring 1996	Krogerup Folk High School – primary subjects: Litterature studies and psychology.
1992 - 1995	Mathematical student at Slagelse Gymnasium – primary subjects: Mathematics and Physics. Grade point average (weighted) ¹ : 10.2 Awarded scholarship from “Slagelse Lærde Skoles Stipendiefond”.

¹All grades according to the Danish 13-scale (see <http://www.ciriusonline.dk/default.aspx?ID=3572>).

Employment

- 2004 - Ph.D. Fellow in the Programming, Logic, and Semantics group at the IT University of Copenhagen (on leave Spring 2006, see below).
- Spring 2006 Project manager on the development of a new Sitecore-based intranet at VEGA – a cultural institution (military draft resistance service).
- 2003 - 2004 Research assistant on the Bigraphical Programming Languages project at the IT University of Copenhagen.
- 2001 - 2003 Web- and database developer in R&D-department at Novozymes A/S (part time).
- 1998 - 1999 Database developer at Byggeinfo A/S (part time).
- 1997 - 1998 Phoner at Danica Insurance (part time).
- 1995 - 1997 Periodical jobs as mailman and home help.

Organizational Experience

- 2005 - 2006 Member of the Ph.D. Studyboard at the IT University of Copenhagen, in Fall 2006 as deputy chairman.
- 2003 - 2005 Founding member of the steering group for a new web magazine (readIT) at the IT University of Copenhagen.
- 2003 - 2004 Member of the executive committee of SITU — the Students Union at the IT University of Copenhagen.
- 2003 - 2004 Member of the Internet- and Software Technology committee.
- 2000 - 2002 Deputy chairman of the studyboard of Computer Science at Roskilde University.
- 2000 Member of the executive committee of the Students Representative Council (“Studenterrådet”) at Roskilde University.
- 1999 - 2000 Representative in the central coordination committee for planning the introduction of new students at Roskilde University.

Research Visits

- Feb 2008 The Computer Laboratory, University of Cambridge (Host: Prof. Robin Milner).
- Aug 2007 - Feb 2008 Laboratoire d’Informatique (LIX), Ecole Polytechnique (Hosts: Prof. Catuscia Palamidessi and Prof. Robin Milner).
- 2006 - 2007 Shorter visits at Dipartimento di Informatica (DI), University of Pisa (Host: Prof. Ugo Montanari); and at Computer Science Laboratory, Ecole Normale Supérieure (ENS) (Host: Bruno Blanchet).

Language Skills Danish: Native. English: Fluent. German: Conversation level. French: Basics. (Nordic: Passive - understood/read).

Teaching and Supervision Co-planned and taught courses in “Interactive web applications and services with Java and XML (2005 and 2006), and in ”Functional Design and Programming” (2004), and supervised projects and assignments in these topics.

Publications and tools

Two refereed journal, conference, and workshop publications; and two recently submitted journal publications. Five technical reports and unrefereed publications.² Co-developer of the BPL tool.

Refereed Journal Publications

- Troels Christoffer Damgaard and Lars Birkedal. Axiomatizing Binding Bigraphs. *Nordic Journal of Computing*, 13(1-2):58–77, 2006. (Presented at the 17th Nordic Workshop on Programming Theory, NWPT'05.)

Refereed Conference and Workshop Publications

- Lars Birkedal, Troels C. Damgaard, Arne John Glenstrup, and Robin Milner. Matching of Bigraphs. *Electronic Notes in Theoretical Computer Science*, 175(4):3–19, 2007. (Presented at GT-VC Workshop 2006, Graph Transformation for Verification and Concurrency.)

Recently Submitted Papers, Technical Reports, Unrefereed Publications etc.

- Arne John Glenstrup, Troels C. Damgaard, Lars Birkedal, and Espen Højsgaard. An Implementation of Bigraph Matching. October 2007. (Submitted for publication)
- Troels C. Damgaard, Arne John Glenstrup, Lars Birkedal, and Robin Milner. An Inductive Characterization of Matching in Binding Bigraphs September 2007. (Submitted for publication)
- Lars Birkedal, Mikkel Bundgaard, Troels Christoffer Damgaard, Søren Debois, Ebbe Elsborg, Arne John Glenstrup, Thomas Troels Hildebrandt, Robin Milner, and Henning Niss. Bigraphical programming languages for pervasive computing. In *Proceedings of the 1st International Workshop on Combining Theory and Systems Building in Pervasive Computing*, pages 653–658, 2006.
- Arne John Glenstrup, Troels Christoffer Damgaard, Lars Birkedal, and Martin Elsmann. BDNF-based matching of bigraphs. Technical Report TR-2006-93, IT University of Copenhagen, October 2006.
- Lars Birkedal, Troels C. Damgaard, Arne John Glenstrup, and Robin Milner. Matching of Bigraphs. Technical Report TR-2006-88, IT University of Copenhagen, June 2006.
- Axiomatizing Binding Bigraphs (revised). Technical Report TR-2005-71, IT University of Copenhagen, October 2005.
- Søren Debois and Troels C. Damgaard. Bigraphs by Example. Technical Report TR-2005-61, IT University of Copenhagen, October 2005.

Tools

- Arne John Glenstrup, Troels C. Damgaard, Lars Birkedal, and Espen Højsgaard. The BPL tool — a prototype engine for experimenting with bigraphical languages. Online version at <http://tiger.itu.dk:8080/bplweb/>
Downloadable version at http://www.itu.dk/research/pls/wiki/index.php/BPL_Tool

²Publications available at <http://www.itu.dk/people/tcd/index.html#publications>.