



Curriculum Vitae

Dr. Mircea-Dan HERNEST

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I am a Romanian, and thus European citizen.
I am single. I am fluent in English, French, Romanian.

Current Affiliation

I am a post-doc research assistant of [Queen Mary University of London](#). Between 1st January 2010 and 15 June 2010 I was a post-doc researcher in the University Joseph Fourier Grenoble ([TIMA](#) research unit, team [VDS](#), [ANR](#) project [FME3](#)). Between 15 June 2009 and 31 Dec. 2009 I had been a post-doc researcher in the University of Lisbon, Portugal. From 15 Feb. 2007 until 28 Feb. 2009 I had been a post-doc researcher and teacher in the [Institute for Informatics](#) of the [University of Innsbruck](#).

I am a doctor in Computer Science in co-tutelle from École Polytechnique ([LIX](#) - Laboratoire d'Informatique, Project [LogiCal](#), Prof. Jean-Pierre [Jouannaud](#)) and Universität München (Mathematisches Institut, Prof. Helmut [Schwichtenberg](#)).

I wrote the first [Dialectica](#) extraction modules for the proof system [MinLog](#), a 215KB Scheme source code development, see <http://www.brics.dk/~danher/MLFD/>

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Homepage: <http://www.brics.dk/~danher>

PhD Thesis: <http://www.brics.dk/~danher/teza>

Publications (all, in PDF): <http://www.brics.dk/~danher/pub>

Diplomas of all my studies (scans): <http://www.brics.dk/~danher/Diplome>

References - Recommendations

1. Dr. [Oliva Paulo](#) — paulo.oliva@eecs.qmul.ac.uk
2. Prof. [Kohlenbach Ulrich](#) — kohlenbach@mathematik.tu-darmstadt.de
3. Prof. [Berger Ulrich](#) — u.berger@swan.ac.uk
4. Prof. [Schwichtenberg Helmut](#) — schwicht@math.lmu.de

Published Papers [3 journal + 7 conference, 8 refereed]

In the reversed chronological order of the publication date (2 to 8 are peer-reviewed):

1. [Modal Functional Interpretation](#) [5 pages]
— submitted to Notre Dame Journal of Formal Logic
2. [Light Monotone Dialectica methods for Proof Mining](#) [10 pages, *journal*]
— published by [Mathematical Logic Quarterly](#), Vol. 5/2009, pages 551-561

3. *Hybrid functional interpretations* [with Paulo Oliva | 10 pages]
— in Springer LNCS volume 5028, pages 251-260 — Presented at CiE'08
4. *Light Dialectica Revisited* [with Trifon Trifonov | 16 pages, *journal*]
— in APAL, Vol. 161/2010, Issue 11, pages 1379-1389 - Presented at CL&C'08
5. *Synthesis of moduli of uniform continuity by the Monotone Dialectica Interpretation in the proof-system MinLog* - 12 pages — Presented at LFMTP@FLoC'06, now published by Elsevier's ENTCS in Volume 174, Issue 5, Pages 141-149 .
6. *Light Dialectica program extraction from a classical Fibonacci proof* - 9 pages
— Presented at DCM @ ICALP 2006, now published by Elsevier's ENTCS in Volume 171, Issue 3, Pages 43-53 .
7. *Light Functional Interpretation - an optimization of Gödel's technique towards the extraction of (more) efficient programs from (classical) proofs* - 16 pages - (CSL'2005) 19th Computer Science Logic, Oxford, UK, 25 Aug 2005. Published in Springer LNCS, July 2005, Volume 3634, Pages 477 - 492. Proceedings Editor: Luke Ong.
8. *A complexity analysis of functional interpretations* - with Ulrich Kohlenbach - 47 pages. Published in Elsevier's Theoretical Computer Science (TCS) *journal*, 338(1-3):200–246, 10 June 2005, communicated by Don Sanella.
9. *A comparison between two techniques of program extraction from classical proofs* - 03 pages - extended abstract presented at the 17th Computer Science Logic, Vienna, Austria, 25 Aug 2003 (CSL'2003). Published by the Kurt Gödel Society (KGS) in the KGS's *Collegium Logicum* series, vol. VIII, 2004, pages 99–102.
10. *Classical models are particular cases of Probabilistic models* - 11 pages. Published in the Proceedings of the 4th International Symposium on Economic Informatics, the Academy of Economic Sciences (ASE), Bucharest, May 6-9, 1999.

Other education and work experience

Between August 1999 and October 2001 I was a graduate student at BRICS (Basic Research in Computer Science), University of Aarhus, Denmark - scientific advisor Prof. Ulrich Kohlenbach. I was also a Teaching Assistant in the Computer Science department of Aarhus University. These studies were concluded with a Master degree in Computer Science from the University of Aarhus, Denmark.

Between August 1998 and July 1999 I was an analyst-programmer at The National Institute for Research and Development in Informatics (ICI), Bucharest, Romania. I was also a Teaching Assistant and Masters student at the department for Computer Science of the Faculty of Mathematics of the University of Bucharest, Romania. Passed 7 out of 10 examinations with maximum grade. Program not concluded for financial reasons. Moved to BRICS, Denmark (see above)

Between August 1994 and July 1998 I was a student of the Faculty of Mathematics (profiled on Theoretical Computer Science) of the University of Bucharest, Romania.