Joachim Denil

Home Address: Kerkhofstraat 37,Londerzeel, 1840, Belgium
Living Address: 1469a Avenue Argyle, H3G 1V5, Montreal, QC, Canada
Phone: +32 479 262 063 E-Mail: Joachim.Denil@gmail.com

Personal Details

Name: Joachim Mathijs Denil
Date of Brith: 15th of June 1981
Nationality: Belgium

Experience

McGill University, MSDL-lab, Montreal, Canada   March 2013 – April 2014

- Research on multi-paradigm modeling techniques for Software-Intensive and Cyber-Physical Systems.

- Funded by the NECSIS-project, supervised by Hans Vangheluwe

Universiteit Antwerpen, Ansymo-lab, Antwerpen, Belgium   October 2008 – March 2013

- Research towards the PhD Degree in Computer Science on the topic of Deployment of Software-intensive Systems.

- Part of the teaching staff of the Karel de Grote University College: Electronic Engineering. Responsible for lab sessions and teaching real-time operating systems and automotive data communication.

- Funded by the RIOFI industrial research fund, Universiteit Antwerpen, Belgium

Karel de Grote University College, TERA-labs, Antwerpen, Belgium   September 2006 – October 2008

- Applied research on an automotive data communication protocol: FlexRay

- In cooperation with different Flemish automotive companies (Leuven Measurement Systems (LMS), Punch Powertrain, Spicer Off-Highway, etc.)

- Funded by the IWT, Belgium

Education

Universiteit Antwerpen, Belgium   October 2008 – March 2013

Doctor of Philosophy (PhD), Computer Science
"Design, Verification and Deployment of Software-Intensive Systems: A Multi-Paradigm Modelling Approach"
Supervisor(s): Serge Demeyer (UA), Paul De Meulenaere (KdG), Hans Vangheluwe (UA, McGill)

Vrije Universiteit Brussel, Belgium   September 2006 – June 2008

Bachelor of Science, Computer Science
Graduated with great distinction.

Karel de Grote University College, Belgium   September 2004 – June 2006

Bachelor of Science and Master of Science: Industrial Sciences: Electronic Engineering: ICT
Master: Graduated with great distinction
Bachelor: Graduated with distinction

Hogeschool Gent, Belgium   **September 2001 – June 2004**

Graduaat (non-research Bachelor) Applied Computer Science
Graduated with distinction

Publications

Journal Publications and Book Chapters

- Joachim Denil, Serge Demeyer, Paul Demeulenaere, Kurt Maudens, Kris Vanstechelmans ; Migrating from a proprietary RTOS to the OSEK standard using a wrapper: in M. Conti, S. Orcioni, N. Martínez Madrid, R. Seepold; Lecture Notes in Electrical Engineering, Solutions on embedded systems, Springer, 2011

Peer-reviewed Conference and Workshop Publications

- Bart Meyers, Manuel Wimmer, Hans Vangheluwe, Joachim Denil, "Towards Domain-Specific Property Languages: The ProMoBox Approach", DSM Workshop, Indianapolis, 2013

- Magnus Persson, Martin Törngren, Ahsan Qamar, Jonas Westman, Matthias Biehl, Stavros Tripakis, Hans Vangheluwe and Joachim Denil, "A Characterization of Integrated Multi‑View Modeling for Embedded Systems', EMSoft 2013, Montreal, 2013

- Bart Meyers, Joachim Denil, Frederic Boulanger, Cecille Hardebolle, Christophe Jacquet, Hans Vangheluwe, "A DSL for Explicit Semantic Adaptation", 7th International Workshop on Multi-Paradigm Modeling, Miami, 2013

- Levi Lucio, Sadaf Mustafiz, Joachim Denil, Hans Vangheluwe, Maris Jukss, FTG+PM: An Integrated Framework for Investigating Model Transformation Chains. SDL Forum 2013: 182-202, Montreal, 2013

- Sadaf Mustafiz, Joachim Denil, Levi Lucio, and Hans Vangheluwe; "The FTG+PM Framework for Multi-Paradigm Modelling: An Automotive Case Study"; 6th International Workshop on Multi-Paradigm Modeling, 2012

- Joachim Denil, Hans Vangheluwe, Paul De Meulenaere, Serge Demeyer: "Calibration of deployment simulation model -- a multi-paradigm modelling approach", TMS-DEVS – MOD4SIM, Spring Simulation Multi-Conference, Boston, 2012

- Joachim Denil, Hans Vangheluwe, Pieter Ramaekers, Paul De Meulenaere, Serge Demeyer, "DEVS for AUTOSAR platform modeling" Proceedings SPRINGSIM'2011 : 2011 Spring Simulation Multi-Conference, Boston, 2011

- Tim Hermans, Pieter Ramaekers, Joachim Denil, Jan Anthonis and Paul De Meulenaere. Integration of AUTOSAR in an Embedded Systems Development Process: A Case Study (short paper), Proceedings of the 37th EUROMICRO conference on software engineering and advanced application, 2011

- Joachim Denil, Antonio Cicchetti, Matthias Biehl, Paul De Meulenaere, Romina Eramo and Serge Demeyer; "Automatic Deployment Space Exploration Using Refinement Transformations"; 5th International Workshop on Multi-Paradigm Modelling, Wellington (NZ), 2011

- Tim Hermans, Joachim Denil, Paul De Meulenaere, Jan Anthonis "Decoding of data on a CAN powertrain network", proceedings of the 16th annual symposium on communication and vehicular technology in the benelux, 2009

- Joachim Denil, Serge Demeyer, Paul De Meulenaere, Kris Vanstechelman and Kurt Maudens, "Wrapping a Real-time Operating System with an OSEK Compliant Interface - a Feasibility Study", 7th International Workshop on Intelligent solutions in Embedded Systems, Ancona, 2009

Technical Reports

- Joachim Denil, Han Gang, Magnus Persson, Xue Liu, Haibo Zeng, Hans Vangheluwe, "Model-Driven Engineering Approaches to Design Space Exploration", School of Computer Science, McGill University, January 2013, SOCS-TR-2013.1

- Levi Lucio, Joachim Denil, Hans Vangheluwe, "An Overview of Model Transformations for a Simple Automotive Power Window", School of Computer Science, McGill University, January 2012, SOCS-TR-2012.2

- Levi Lucio, Sadaf Mustafiz, Joachim Denil, Bart Meyers, Hans Vangheluwe, "The Formalism Transformation Graph as a Guide to Model Driven Engineering", School of Computer Science, McGill University, March 2012, SOCS-TR2012.1

Program Committees

- 4th International Workshop on Model-Driven Approaches for Simulation Engineering, 2014

- 7th International Workshop on Multi-Paradigm Modelling, 2013

Attended Conferences and Workshops

- 13th Workshop on Domain-Specific Modelling, Indianapolis, USA, October 27, 2013

- EMSoft 2013, Montreal Canada, September 29 – October 4, 2013

- SCS Summer Simulation Multi-Conference, Toronto, Canada, 7-10 July, 2013

- 16th International System Design Languages Forum, Model Driven Dependability engineering, Montreal, Canada, 26-28 June, 2013

- NECSIS Workshop 2013, Montreal, Canada, 18-21 June 2013

- 10th Bellairs CAMPaM workshop, Barbados, 10-17 May 2013

- NECSIS Workshop, Ottowa, 24 - 27 June 2012

- 9th Bellairs CAMPaM workshop, Barbados, 28 April - 5 may 2012

- 2012 Spring Simulation Multi-Conference, Orlando, USA, 26-30 March 2012

- MPM workshop, University of Antwerp, Antwerp, Belgium 20 December 2011

- 5th International Workshop on Multi-Paradigm Modeling: MPM'11, Wellington, New-Zealand, October 16, 2011

- 14th International Conference on Model-Driven Engineering Languages and Systems (MoDELS), Wellington, New-Zealand, 16-21 October 2011

- Embedded Source Code Quality Seminar, Antwerp, Belgium, 20 September 2011,

- 8th Bellairs CAMPaM Workshop, Bellairs Research Institute, Barbados, 15-22 April 2011

- 2011 Spring Simulation Multi-Conference, Boston, USA, 4-7 April 2011

- 25th IEEE/ACM International Conference on Automatic Software Engineering, Antwerp, Belgium, 20-24 September 2010

- AUTOSAR Seminar, Antwerp, Belgium, 14 September 2010

- Internationaal Technologisch Seminarie "In Vehicle Networks", Brussels, Belgium, 1 December 2009

- IEEE Benelux chapter symposium on communication and vehicular technology SCVT09, Louvain-La-Neuve, Belgium, 19 November 2009

- 7th International Workshop on Intelligent Solutions in Embedded Systems, Ancona, Italy, 25-26 June 2009

- Design, Automation and Test in Europe DATE 2008, Munich, Germany, 10-14 March 2008

- FlexRay Product Day, Stuttgart, Germany, 28-29 November 2007

- Measurements in Automotive FEE, Genk, Belgium, 6 June 2007

- FlexRay Symposium, Stuttgart, Germany, 6 March 2007

Research Visits

Supélec, France   **25th January – 1th February 2013**

Heterogeous Modeling of Embedded Systems Lab
Brainstorm about domain-specific languages for semantic adaptation

McGill University, Canada   **1th August – 31th August 2012**

Modelling, Simulation and Design Lab (MSDL)
Use and implementation of search techniques in model transformation models.

McGill University, Canada   **28th August – 5th September 2011**

Modelling, Simulation and Design Lab (MSDL)
Use of model transformation for the deployment problem in automotive software-intensive systems

Languages

Mother Tongue: Dutch

English: Fluent reading, writing and speaking

French: Intermediate level for reading and speaking