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**Current Position:** Marie Curie Fellow, from May 2011. Marie-Curie Fellowship (Grant) Requirements@run.time. Recently has been involved in EU CONNECT. I am also a Visiting Researcher at Lancaster University. **Main tasks:** conduct research, lead of work packages in research projects including UK and European projects, organization of international workshops (number of participants 20-60 people), contribute in research proposals to get funding (research projects proposals), supervision support of MSc and PhD students research, teaching undergraduate and postgraduate students.

**Current Research:** I am interested in all aspects of software modelling and specially the application of model-driven techniques, during the development and operation of dynamically adaptive systems. I am particularly interested in what I call *models@run.time*, the use of models and model-driven techniques during runtime. Models can be used, for example, to check correctness and consult the current state of a system during execution. A key benefit is that models can be used to offer a richer semantic support for runtime decision-making related to system adaptation and other runtime concerns. The use of reflection is crucial in order to have a self-representation of the system that can be consulted in operation. I believe that *models@run.time* has potential for the development systems that must adapt dynamically to their environment, from Requirements through to Implementation. I have coined and promoted the new research term and research about [models@run.time](#), with my colleagues Prof. Gordon Blair (from UK) and Prof. Robert France (from USA).

More recently, I have focused on Requirements-aware systems. I will start a Marie-Curie Fellow in INRIA Paris – Rocquencourt, France in May 2011. My project is called Requirements@run.time: requirements-aware systems

**Research interests and keywords:** MDE, models@runtime, requirements@runtime, Self-adaptive systems,

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## Education

- PhD in Computing, Lancaster University, March 2008

-MS in Computer Science and Software Engineering, Universidad Central de Venezuela (UCV), (honourable mention) 1998

- Five-year Bachelor in Computing Science, Computing School, Universidad Central de Venezuela, (ranking 4<sup>th</sup> in a group of 37), 1993

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## Employment History

2011 May – Present, Marie-Curie Fellow, INRIA, France

2008 April – April 2011, Senior Research Associate, Lancaster University

2006 – March 2008, Research Associate, Lancaster University

2003 – 2006, Teaching Assistant, Lancaster University

1997 – 2003, Lecturer, Computing School, Universidad Central de Venezuela (UCV)

1993 – 1997, Part-Time Lecturer, Computing School, Universidad Central de Venezuela (UCV)

1991 – 1997, Analyst and Project leader PROSERVFACICA, Projects and Services of Sciences Faculty at the UCV, Venezuela. The main projects were related with the Venezuelan Oil Holding - PDVSA

1997: Instructor of CORBA Courses, National Oil Holding – PDVSA and UCV

1993: Instructor of X Window Courses, National Oil Holding - PDVSA

1991 – 1993, Undergraduate Teaching Assistant, Course: Probability and Statistics, Computing School, Universidad Central de Venezuela (UCV)

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## Research Activities

### Research Projects

- Main Investigator of European Marie Curie project requirements@run.time May 2011 - Present
- Investigator of European project CONNECT February 2011 - Present
- Investigator of European project DiVA (Dynamic Variability, February 2008 – January 2011
- Investigator of ESPRC UK Project The Divergent Grid, October 2005 – January 2008
- Investigator/Collaborator of European project RUNES Project, European Project Sixth Framework Programme. September 1st 2004 - April 30th 2007

### Proposed Successful Grants

- requirements@runtime: Requirements-aware Systems, 24-month Marie Curie Action Intra-European Fellowship (Main author for project proposal)
- DiVA: Dynamic Variability in complex, Adaptive Systems, 3-year project STREP proposal, FP7-ICT (Co-author for project proposal)
- VERA: Verifiable Aspect Models for Middleware Product Families - (6-month project ESPRC Visiting Fellowship) Co-author for project proposal, 2006

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## Services to Research Community

### Organization of Events

- Coordinator Five-day Dagstuhl seminar on Models@run.time 2011, Germany, <http://www.dagstuhl.de/> (participants 45-60 people)
- Co-organizer and co-founder of Workshop Requirements@run.time in RE 2010 and 2011 (average participants 20-35 people)
- Co-organizer and co-founder of Workshop Models@run.time in MODELS 2006, 2007, 2008, 2009, 2010, 2011 (average participants 20-35 people)
- Co-organizer of the First International workshop on Validation and Verification of Dynamic Software Systems ViDaS' 10, Paris, April, 2010
- Co-organizer Workshop M-ADAPT: Model-Driven Software Adaptation in ECOOP 2007 (participants >20 people)
- Co-organizer Working Meeting "Models and Aspects for Product Families: A Roadmap for Research" 1st Nov 2006, Lancaster University, UK

## Professional Services

### International Projects Reviewer

- **French National Research Agency (ANR)**, Expert reviewer, France, 2010
- **Vienna Science and Technology Fund**, Austria, project reviewer/evaluator, 2010

### Publications Reviewer

- **Journal SoSyM Software and Systems Modeling**, Springer, <http://sosym.se-rwth.de/> (regular reviewer)
- **JUCS** Special issue on Software Components, Architectures and Reuse- Special Issue, Summer 2009
- **IEEE Software Special Issue: Domain-Specific Languages & Modeling**, Jul/Aug 2009
- **Journal of Systems and Software** - Special issue on Software Architectures and Mobility
- **Journal Formal Aspects of Computing (FAC)**
- **ECOOP 2008, MODELS 2008, 2009, ICMT'11**

## Program Committee and organization

I have served or serve as Program Committee member of:

### 2012

- ICSE 2012, Zurich, Switzerland, Students Volunteer Chair
- MODELS Conference 2012 PC
- SEAMS Symposium 2012 PC

### 2011

- Poster and Demonstration RE 2011 PC
- SBES 25th Brazilian Symposium on Software Engineering (SBES), Sep 26-30 2011 Sao Paulo, Brazil
- MoDRE 1st Model-Driven Requirements Engineering workshop (colocated with the 19th International Requirements Engineering Conference), August, 2011

- SEAMS 2011 Symposium Software Engineering for Adaptive and Self-Managing Systems (SEAMS) at ICSE 2011 , May 21-28 2011 Hawaii, USA
  - VAST 2011 First Workshop on Variability-intensive Systems Testing, Validation & Verification (VAST) at ICST 2011 , March 21-25 2011 Berlin, Germany
- 2010**
- SOAR 2010 Second International Workshop on Self-Organizing Architectures at The 7th International Conference on Autonomic Computing and Communications, , June, 2010, Washington, DC, USA
  - SEAMS 2010 Workshop Software Engineering for Adaptive and Self-Managing Systems (SEAMS) at ICSE 2010 , 2010 Cape Town, South Africa
  - WCSI 2010 International Workshop on Component and Service Interoperability June 29th 2010 at TOOLS 2010, June 28 - July 2, 2010, Malaga, Spain
- 2009**
- WICSA/ECSA: Joint Working IEEE/IFIP **Conference on Software Architecture 2009 & European Conference on Software Architecture 2009 (WICSA/ECSA)**, Cambridge, UK, 14 – 17 September 2009
  - SOAR 2009 **Workshop Self-Organizing Architectures at WICSA/ECSA 09**, Cambridge, UK, 14 September, 2009
  - REV 2009 4th **International Workshop on Requirements Engineering Visualization (REV'09)**, Atlanta, USA, 31th August,, 2009
  - WASELF 2009 **2nd Workshop on Autonomic and SELF-adaptive Systems**, San Sebastian, Spain, 8th September, 2009
  - SEAMS 2009 **Workshop, Software Engineering for Adaptive and Self-Managing Systems (SEAMS)** at ICSE 2009, Mon/Tue, May 18-19, 2009 Vancouver, BC, Canada
- 2008**
- AQuSerM: **Advances in Quality of Service Management**, München, Germany, September 18th, 2008, with EDOC 2008
  - WASELF-\*: **Workshop on Autonomic and SELF-adaptive Systems**, Gijon, Spain, October 7th, 2008
  - REV 2008 **Third International Workshop on Requirements Engineering Visualization (REV'08)**, Barcelona, Spain, Monday 8th September, 2008
  - WCAT 2008 5th **Workshop on Coordination and Adaptation Techniques**, L'Aquila, Italy, September 15th, 2008, ASE 2008
  - ARAMIS 2008 **Automated EngineerRing of Autonomic and run-tiMe evolving Systems**, L'Aquila, Italy, September 16th, 2008, ASE 2008
  - MDDAS 2008 **The First IEEE International Workshop on Model-Driven Development of Autonomic Systems**, Turku, Finland, July 28 - August 1, 2008
  - IDEAS 2008 **11th Iberoamerican Workshop Requirements Engineering and Software Environments**, 11-15 February, Recife, Brazil
  - IRMA International Conference 2006, **TRACK: UML and Unified Process**, USA

#### Talks and Invitations

- **"Dagstuhl Perspective Workshop: Model Engineering of Complex Systems, 10-13 August 2008, Dagstuhl, Germany"**, 10-08-2008 – 13-08-2008
- **"Supporting the Model Driven Development of Reflective, Component-based Adaptive Systems"**, Conference Code Generation, 2008, CG2008, Cambridge, UK, 25 - 27 June 2008
- **Workshop on Quality of Service Management**, at King's College London, 22nd and 23rd of April 2008
- **Invited talk: "Dynamically Adaptive Systems supported by Reflective Component-based Technologies: a Software-based Models Perspective"**, 25<sup>th</sup> February, 2008, King's College London
- **Dagstuhl-Seminar on "Software Engineering for Self-Adaptive Systems"**, 13-01-2008 – 18-01-2008. Workshop Organized by Cheng H.C. Betty, de Lemos Rogerio, Giese Holger, Inverardi Paola, Magee Jeff
- Workshop on **"Perspectives on Model Driven Engineering of Software"**, Rennes, April 2007, organized by Prof Jézéquel

#### Panels

- Panelist invited at **SEAMS Workshop (Software Engineering for Adaptive and Self-Managing Systems)**, 12,13 May held with ICSE, 2008

#### Others

Student Volunteer at UML 2004, ECOOP 2004, ECOOP 2005, and OOPSLA 2006

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#### Publications

#### Editorials

- **"Editorial: IEEE Computer: Special issue on [Models@run.time](#)"**, Nelly Bencomo, Gordon Blair and Robert France, October, 2009

## Journal Publications and Book Contributions

- **"Dynamic variability in adaptive systems"**, Ruzanna Chitchyan, Brice Morin, Franck Fleurey, Nelly Bencomo, Arnor Solberg and Thomas Genssler, Book Chapter in Book Aspect-Oriented, Model-Driven Software Product Lines The AMPLE Way, Cambridge University Press, October, 2011
- **"RELAX: A Language to Address Uncertainty in Self-Adaptive Systems Requirements"**, Jon Whittle, Pete Sawyer, Nelly Bencomo, Betty H.C. Cheng, and Jean-Michel Bruel in Requirements Engineering Journal, 2010,
- **"Using Architecture Models to Support the Generation and Operation of Component-based Adaptive Systems"**,  
Nelly Bencomo, Gordon Blair,  
Chapter in Book on Software Engineering for Self-Adaptive Systems (SEfSAS Book) [LNCS Hot Topics on Software Engineering for Self-Adaptive Systems](#), 2009
- **"Software Engineering for Self-Adaptive Systems: A Research Roadmap"**, Betty H.C. Cheng, Rogério de Lemos, Holger Giese, Paola Inverardi, Jeff Magee, Jesper Andersson, Basil Becker, Nelly Bencomo, Yuriy Brun, Bojan Cukic, Giovanna Di Marzo Serugendo, Schahram Dustdar, Anthony Finkelstein, Cristina Gacek, Kurt Geihs, Vincenzo Grassi, Gabor Karsai, Holger M. Kienle, Jeff Kramer, Marin Litoiu, Sam Malek, Rafaela Mirandola, Hausi A. Muller, Sooyong Park, Mary, Shaw, Matthias Tichy, Massimo Tivoli, Danny Weyns, Jon Whittle, Chapter in Book on Software Engineering for Self-Adaptive Systems (SEfSAS Book) [LNCS Hot Topics on Software Engineering for Self-Adaptive Systems](#), 2009
- **"Dynamic Variability in Adaptive Systems"**, Ruzanna Chitchyan, Franck Fleurey, Brice Morin, Nelly Bencomo, Arnor Solberg, and Thomas Genßler, Chapter 13, EU 7<sup>th</sup> F AMPLE Project contributions, 2009
- **"Traceability Management through Use Cases when Developing Distributed Object Applications"** extended/refereed article,  
Bencomo, N., Mateo, A., in Journal of Object Technology, vol. 4, no. 6, 2005 pp 29-43

## Conferences Publications

- **"Towards Requirements Aware Systems: Run-time Resolution of Design-time Assumptions"**,  
Kristopher Welsh, Pete Sawyer, Nelly Bencomo 26th IEEE/ACM International Conference On Automated Software Engineering, ASE 2011, Kansas, USA, November 6 - 10, 2011
- **"Requirements-Aware Systems A research agenda for RE for self-adaptive systems"**, Pete Sawyer, Nelly Bencomo, Jon Whittle, Emmanuel Letier, Anthony Finkelstein, International Requirements Engineering Conference, RE 2010, Sydney, Australia, September 27th - October 1st 2010, Acceptance rate: 15.9%
- **"Requirements Reflection: Requirements as Runtime Entities"**, Nelly Bencomo, Jon Whittle, Pete Sawyer, Anthony Finkelstein, and Emmanuel Letier, 32st International Conference on Software Engineering 2010, ICSE 2010, Track on New Ideas and Emerging Results (NIER), Cape Town, South Africa, 2-8 May 2010, Acceptance rate: 25%
- **"A Goal-Based Modeling Approach to Develop Requirements for Adaptive Systems with Environmental Uncertainty"**, Betty H.C. Cheng, Pete Sawyer, Nelly Bencomo, and Jon Whittle, ACM/IEEE 12th International Conference On Model Driven Engineering Languages And Systems , MODELS 2009, Denver, Colorado, USA, 4 - 9 October 2009, Acceptance rate: 16%
- **"RELAX: Incorporating Uncertainty into the Specification of Self-Adaptive Systems"**, Jon Whittle, Pete Sawyer, Nelly Bencomo, Betty H.C. Cheng, and Jean-Michel Bruel, 17th IEEE International Requirements Engineering Conference, RE 2009, Atlanta, Georgia, USA, 31 August - 4 September 2009, Acceptance rate : 21%
- **"An Aspect-Oriented and Model-Driven Approach for Managing Dynamic Variability"**,  
Brice Morin, Franck Fleurey, Nelly Bencomo, Jean-Marc Jezequel, Arnor Solberg, Vegard Dehlen, and Gordon Blair,  
[MODELS 08](#) Conference, Toulouse, France, 28 September - 3 October 2008, Acceptance rate: 21%

- **"Engineering Complex Adaptations in Highly Heterogeneous Distributed Systems"**, Paul Grace, Gordon Blair, Carlos Flores, *Nelly Bencomo*  
2nd International Conference on Autonomic Computing and Communication Systems [Autonomics 2008](#), Turin, Italy, September 2008, *Invited paper*
- **"Genie: Supporting the Model Driven Development of Reflective, Component-based Adaptive Systems"**,  
*Nelly Bencomo*, Paul Grace, Carlos Flores, Danny Hughes, and Gordon Blair  
Formal Research Demonstrations, 30th International Conference on Software Engineering, [Formal demos](#) at [ICSE 2008](#), 811-814, Leipzig, Germany, May 2008, Acceptance rate for formal demos: 20.5%
- **"Goal-Based Modeling of Dynamically Adaptive System Requirements"**,  
Heather J. Goldsby, Pete Sawyer, *Nelly Bencomo*, Danny Hughes, and Betty H. C. Cheng  
15th IEEE International Conference on Engineering of Computer-Based Systems, [ECBS 08](#), Belfast, Northern Ireland, 31 March - 4 April, 2008.
- **"Adapting the Unified Process UP for the Development of CORBA Applications"**,  
*N.Bencomo*, A. Matteo, IRMA Conference, PH,USA May, 2003
- *N.Bencomo*, A. Matteo, Distribution and the Internet Conference, CIMPAUNESCOINRIA,Vzla, Jan, 2002 (in Spanish)
- **"Rescate de Aplicaciones Legacy: Mecanismo de Comunicación para Procesos Legacy con memoria compartida en Aplicaciones Distribuidas"**,  
*N.Bencomo*, et all, Proc. Latin American Conference of Informatics CLEI 2001, Mérida, Vzla Sep, 2002 (in Spanish)
- **"PTMS: A graphical Multiuser Interface for a RealTime System"**,  
*N.Bencomo*, et all, Practical Experience Segment of Distributed Objects Conference 2001, Sao Paolo, Brazil Nov, 2001
- **"Comparación de CORBA y X Web en el Desarrollo y Desempeño de Una Interfaz Gráfica Multiusuario"**,  
*N.Bencomo* et all, Proc. Latin American Conference of Informatics CLEI2000, Méjico, 2000 (in Spanish)
- **"Java Implementation for user interface frameworks"**, *N.Bencomo*, F. Losavio. A. Matteo, Proc. TOOLS Conference 97, Technology of ObjectOriented Languages and Systems 1997, Sta. Barbara, California, USA, 1997

## Workshop Publications

- **"Tracing Requirements for Adaptive Systems using Claims"**, Kristopher Welsh; *Nelly Bencomo*; Peter Sawyer, 6th International Workshop on Traceability in Emerging Forms of Software Engineering, TEFSE'11, Honolulu, Hawaii, May 23, 2011,
- **"How dynamic is your Dynamic Software Product Line?"**, *Nelly Bencomo*, Jaejoon Lee, Svein Hallsteinsen, 4th International Workshop on Dynamic Software Product Lines ,DSPL '10, Jeju Island, South Korea, 13 September 2010,
- **"On the Use of Software Models during Software Execution"**,  
*Nelly Bencomo*,  
Workshop on Modeling in Software Engineering [MISE'2009](#), at ICSE'09, 2009
- **"Comparitive Study of Variability Management in Software Product Lines and Runtime Adaptable Systems"**,  
Vander Alves, Daniel Schneider, Martin Becker, *Nelly Bencomo*, Paul Grace,  
3rd International workshop on Variability Modelling of Software-intensive Systems, [VaMOS](#), Sevilla, Spain, 28-30 January, 2009

- **"Modeling and Validating Dynamic Adaptation"**,  
Franck Fleurey, Vegard Dehlen, *Nelly Bencomo*, Brice Morin, Jean-Marc Jézéquel,  
[Models@run.time](#) Workshop, Toulouse, France, 30 September 2008
- **"Dynamically Adaptive Systems are Product Lines too: Using Model-Driven Techniques to Capture Dynamic Variability of Adaptive Systems"**,  
*Nelly Bencomo*, Pete Sawyer, Gordon Blair, and Paul Grace  
[2nd International Workshop on Dynamic Software Product Lines \(DSPL 2008\)](#), with [SPLC 2008](#) Limerick, Ireland, 8 September 2008,
- **"A Language for Self-Adaptive System Requirements"**,  
Jon Whittle, Pete Sawyer, *Nelly Bencomo*, and Betty Cheng,  
[4th International Workshop on Service-Oriented Computing Consequences for Engineering Requirements \(SOCCER'08\)](#) with [RE 2008](#), Barcelona, Spain, 8 September 2008
- **"Reflective Component-based Technologies to Support Dynamic Variability"**,  
*Nelly Bencomo*, Gordon Blair, Carlos Flores, and Pete Sawyer  
2nd International Workshop on Variability Modelling of Software-intensive Systems, [VaMoS 08](#), Essen, Germany, January 16-18, 2008.
- **"Visualizing the Analysis of Dynamically Adaptive Systems Using *i\** and DSLs"**,  
Pete Sawyer, *Nelly Bencomo*, Danny Hughes, Paul Grace, Heather J. Goldsby, and Betty H. C. Cheng  
2nd International Workshop on Requirements Engineering Visualization, held with the 15th IEEE International Requirements Engineering Conference, New Delhi, India 2007.
- **"Models, Reflective Mechanisms and Family-based Systems to Support Dynamic Configuration"**,  
*Nelly Bencomo*, Gordon Blair and Paul Grace, Workshop on MOdel Driven Development for Middleware (MODDM), held with the 7th International Middleware Conference Melbourne, Australia, November, 2006.
- **"Genie: a Domain-Specific Modeling Tool for the Generation of Adaptive and Reflective Middleware Families"**,  
*Nelly Bencomo* and Gordon Blair, The 6th OOPSLA Workshop on Domain-Specific Modeling, Portland, October, 2006.
- **"Ubiquitous Computing: Adaptability Requirements Supported by Middleware Platforms"**,  
*Nelly Bencomo*, Pete Sawyer, Paul Grace, and Gordon Blair, Workshop on Software Engineering Challenges for Ubiquitous Computing, Lancaster, June, 2006.
- **"Reflection and Aspects Meet Again: Runtime Reflective Mechanisms for Dynamic Aspects"**,  
*Nelly Bencomo*, Gordon Blair, Geoff Coulson, Paul Grace, Awais Rashid, Proceedings of the First Middleware '05 Workshop on Aspect Oriented Middleware Development (AOMD 05) Grenoble, France, November, 2005.
- **"Towards a MetaModelling Approach to Configurable Middleware"**,  
*Bencomo, N.*, Blair, G.S., Coulson, G., Batista, T., Proc. 2nd ECOOP'2005 Workshop on Reflection, AOP and MetaData for Software Evolution RAM-SE 2005, pp 73-82, Glasgow, Scotland, July 2005
- **"Raising a Reflective Family"**,  
*Bencomo, N.*, Blair, G., Proc. Models and Aspects Handling Crosscutting Concerns in MDSD, Glasgow, Scotland, July 2005
- **"Tracing the Distribution Concern: Bridging the Gap"**,  
*Bencomo N.*, Blair G., Sawyer P., Early Aspects 2004: AspectOriented Requirements Engineering and Architecture Design Workshop, OOPSLA 2004, Canada
- **"Traceability Management through Use Cases when Developing Distributed Object Applications"**,  
*Bencomo N.*, Matteo A., International Workshop Open Issues in Industrial Use Case Modeling, UML 2004, Portugal
- **"Middleware Unaware Software Development and Interoperability using MDA"**,  
*Bencomo N.*, Blair G., Second European Workshop on Model Driven Architecture (MDA) with an emphasis on Methodologies and Transformations September, 2004, Canterbury, England

## Doctoral Symposium Publications

- "**Preening: Reflection of Models in the Mirror a Meta-modelling Approach to Generate Reflective Middleware Configurations**",  
Bencomo, N., Blair G, Lecture Notes in Computer Science, Satellite Events at the MoDELS 2005 Conference: The Doctoral Symposium, MODELS 2005, Springer-Verlag , pp. 337 - 338

## Published Editorials/Reports of organized workshops

- "**Foreword: Second Workshop [requirements@run.time](#)**", Nelly Bencomo, Emmanuel Letier, Jon Whittle, Anthony Finkelstein, November 2011
- "**6th International Workshop on [Models@run.time](#)**", Nelly Bencomo, Gordon S. Blair, Robert B. France, Cédric Jeanneret, MODELS 2010 Workshops, LNCS 6002, Springer-Verlag (2010)
- "**5th International Workshop on [Models@run.time](#)**", Nelly Bencomo, Gordon S. Blair, Robert B. France, Freddy Muñoz, Cédric Jeanneret, S. Ghosh (Ed.): MODELS 2009 Workshops, LNCS 6002, Springer-Verlag (2010)
- "**Foreword: First Workshop [requirements@run.time](#)**", Pete Sawyer, Nelly Bencomo, Jon Whittle, Daniel M. Berry, Anthony Finkelstein, DOI: 10.1109/RERUNTIME.2010.5628554, IEEE Xplore, November 2010
- "**4th International Workshop on [Models@run.time](#)**", Nelly Bencomo, Gordon S. Blair, Robert B. France, Freddy Muñoz, Cédric Jeanneret, S. Ghosh (Ed.): MODELS 2009 Workshops, LNCS 6002, Springer-Verlag (2010)
- "**Third International Workshop on [Models@run.time](#)**", Nelly Bencomo, Gordon S. Blair, Robert B. France, Freddy Muñoz, Cédric Jeanneret: . MoDELS Workshops 2008: 90-96
- "**2nd International Workshop on [Models@run.time](#)**",  
Nelly Bencomo, Gordon Blair and Robert France, Lecture Notes in Computer Science, Satellite Events at the MODELS 2007 Conference, Springer-Verlag,
- "**Model-Driven Software Adaptation (M-ADAPT)**",  
Nelly Bencomo, Gordon Blair and Robert France, ECOOP Workshops 2007: 132-141
- "**Summary of the Workshop [Models@run.time](#) at MoDELS 2006**", Nelly Bencomo, Gordon S. Blair, Robert B. France, MoDELS Workshops 2006: 227-231

## Conference Posters/Tools

- "Run-time Resolution of Uncertainty", Kristopher Welsh, Pete Sawyer, Nelly Bencomo, International Requirements Engineering Conference, **RE 2011, Tool Demonstration Track**, Trento, Italy, 29th August 2nd September 2011
- Danny Hughes, Nelly Bencomo, Gordon Blair, Geoff Coulson, Paul Grace, Barry Porter, Exploiting Extreme Heterogeneity in a Flood Warning Scenario using the GridKit Middleware", **Poster in Middleware Conference 2008**, Leuven Belgium, December, 2008
- Nelly Bencomo, Gordon Blair, Paul Grace, "*The world is going MAD: Models for Adaptation*", **Poster in MoDELS 2006**, Genoa, October, 2006
- Bencomo, N.: "*A Green Family: Generating Publish/Subscribe Middleware Configurations*", **Poster in the 4th Workshop on Adaptive and Reflective Middleware (ARM05)**, Grenoble, France, November, 2005
- Nelly Bencomo, Gordon Blair, Geoff Coulson, and Paul Grace: "*Families of Reflective Middleware Systems: the new generation*", **Poster in MODELS 2005**, Jamaica, October, 2005
- Bencomo N., Matteo A.: "*CUP: A CORBA-based unified process adaptation*", **Poster in ECOOP 2004**, Oslo, Norway, June 2004

## PhD Thesis

- **Supporting the Modelling and Generation of Reflective Middleware Families and Applications using Dynamic Variability**, Ph.D. Thesis. Lancaster University. March 2008

## Miscellaneous Publications and Internal reports

- **"To Adapt or Not to Adapt: that is the Requirements Question"**, Nelly Bencomo and Jon Whittle, Lancaster University, Requirements Quarterly, The Newsletter of the Requirements Engineering Specialist Group of the British Computer Society RESG, pp. 3-5, June, 2008
  - **"Handling Multiple Levels of Requirements for Middleware-Supported Adaptive Systems"**, Pete Sawyer, Nelly Bencomo, Paul Grace, and Gordon Blair, Technical Report (COMP 001-2007), January, 2007, Lancaster University
  - **"CORBAdapted UP: An Unified Process adaptation for CORBA Applications"**, N.Bencomo, A. Matteo, Promotion Project, April 2003 (in Spanish)
  - Bencomo Nelly, "CORBAdapted UP: A Unified Process adaptation for CORBA Applications", **Promotion Project required to be promoted to Profesor Asistente (Tenure Position)**, February 2003 (in Spanish)
  - **"Experiences using Distributed Object Technologies in the Computing Schools at the UCV"**, 2002
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## Honours and Awards

- **Promotion Assistant Lecturer (with Honours, Tenure position)** Computing School, UCV, February, 2003
  - **Award Program for the Researcher's Promotion** (Programa de Promoción al Investigador PPI ), 2001
  - **Award Level III 2002, 2000, 1998** National Commission of the System for Recognition of Merits to Lectures of National Universities CONABA, Venezuela
  - **Best National Postgraduate Thesis 1998**, "UCV/PDVSA-CIED". Universidad Central de Venezuela / National Oil Holding - PDVSA.
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## Grants

- Requirements-aware Systems (requirements@runtime): 24-month Marie Curie Intra-European Fellowship ( 222.547€) (December 2009)
  - Faculty Studentship 3 years (Lancaster University), October 2003 – September 2006
  - International Travel Grant, The Royal Academy of Engineering, April 2009
  - International Travel Grant, The Royal Academy of Engineering, April 2008
  - International Travel Grant, The Royal Academy of Engineering, April 2007
  - ACM SIGSOFT CAPS Grant for MoDELS/UML 2006, Italy, October 1-6 2006
  - International Travel Grant, The Royal Academy of Engineering, October 2006
  - ACM SIGSOFT CAPS Grant for MoDELS/UML 2005, Jamaica, October 2-7 2005
  - Student Travel Grant, ACM/IFIP/USENIX 5th International Middleware Conference, Canada, October 18-22, 2004
  - Student Travel Grant Association Internationale pour les echnologies Objets (AITO), Oslo, Norway June, 2004
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## Teaching Experience

### At Lancaster University, UK:

- 2007, 2008, 2009 Guest Lectures on the use of UML and Models-driven Engineering, for undergraduate students and Master Student at Lancaster
- 2004, 2005, 2006, *Web Technologies Practical course*, Responsible for design of curriculum, overseeing lab activity, designing and grading exams (number of students between 50 and 100).
- 2004, 2005, *Discrete Math course*, Presented lectures, and prepared associated material designing, and grading exams (between 50-100 students)
- 2002, *Concurrent Programming course*, Presented 2 lectures and prepared associated material.

## At UCV, Venezuela:

- 1993-2002 Courses in *Distributed Object Applications, Probability and Statistic and Object-Oriented Simulation*, Responsible for design of curriculum, presenting topics, overseeing lab activity, designing, administering and grading exams, and assigning final grades.

## Courses/events on teaching undertaken or attended

I went through a two-year training as a Instructor Lecturer (Junior Lecturer) after been promoted to Assistant Lecturer (tenure position) at the UCV before joining Lancaster. This training program is very structured and rigorous and is part of the preparation of all Assistant Lecturers in any public university in Venezuela. It is a very competitive field.

During my training I got the certificate for the following course:

- **Teaching techniques and learning strategies in the classroom:** This course was about teaching and learning strategies in the classroom. The course pursues the acquisition of skills to design and deliver material in the classrooms and lab, how to open, develop, and close a lecture in an effective way. It was fully based in reflection and auto feedback received from videos of classes delivered that were filmed. The feedback was discussed by peers and tutor of the course (20 hours 5 sessions of 4 hours each plus the assessment)

- **Fundamentals of the Design of Courses and Elaboration of Programs:** This course was about how to design course programs and syllabus. The course pursues to offer the skills of how to develop and program a course, including the description of the main goals of a course and the specific goals of every lecture/class to be delivered, and strategies of evaluations to be used. (60 hours in 15 sessions of 4 hours each. Assessment: The course needed me to design 2 new courses I was in charged in those days.)

## Technical Knowledge

- Design and modelling, Model-Driven Engineering and code generation technologies, UML, DSL Tools: MetaEdit+, Poseidon, GME.
- Computer programming. Knowledge and skills in Java, C/C++, C concurrent programming, Java reflection capabilities, Lisp, Python, Tcl/Tk, XWindows, FORTRAN, and ModSIM (object-oriented simulation tool)
- Distributed and Parallel Computing and Middleware Java RMI, OMG/CORBA, Web Services, and MPI (Message-Passing Interface),
- Operating systems Unix (including programming) and Windows
- Latex

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**Languages** Spanish (mother tongue) and English

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**Other activities** Cinema, Trekking, Running, and Yoga

**Co-founder of the Latin-American Society in Lancaster University**

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## References

Prof. Gordon Blair, Computing Department, Lancaster University, UK  
Prof. Robert France, Computer Science Department, Colorado State University, USA  
Prof. Betty H.C. Cheng, Computer Science and Engineering, Michigan State University, USA  
Prof. Jon Whittle, Computing Department, Lancaster University, UK  
Dr. Valerie Issarny, Directeur de recherche INRIA ARLES Project-Team, Paris, France