
CURRICULUM VITAE: J. PAUL GIBSON, BSc., PhD.

LAST UPDATE: 9TH JUNE 2010

CURRENT POST: MAÎTRE DE CONFÉRENCES, T&M SUDPARIS

CONTACT INFORMATION

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PERSONAL INFORMATION

DATE OF BIRTH: 19 APRIL 1967.
LANGUAGES: ENGLISH AND FRENCH.

NATIONALITY: BRITISH AND IRISH.
FAMILY STATUS: MARRIED WITH 2 CHILDREN.

HIGHER EDUCATION (1985-1993)

STIRLING UNIVERSITY, Stirling Scotland

Ph.D. (Computing Science): completed 1993 (awarded 1994)

Formal Object Oriented Development of Software Systems Using LOTOS.

B.Sc. (Computing Science and Mathematics 2.1 Hons): 1989

My undergraduate dissertation was titled: *Chaos, Randomness and Natural Patterns.*

ACADEMIC EXPERIENCE: EMPLOYMENT RECORD (SINCE 1992)

LE DÉPARTEMENT LOGICIELS-RÉSEAUX (LOR), TELECOM & MANAGEMENT SUDPARIS, Evry, France.
Maitre de Conferences **October, 2006 - present**

DEPARTMENT OF COMPUTER SCIENCE, NUI MAYNOOTH, Co. Kildare, Ireland.
Senior Lecturer **October, 2003 - October, 2006**
Sabbatical Leave (MOSEL research group, Nancy, France), **September 05 - August 06**
Acting Head of Department, **January 05 - June 05**

Lecturer **September, 1998 - September, 2003**

UNIVERSITY NANCY I (UHP), France.
Assistant temp. d'enseignement et de recherche **September 97 - September 98**

CNRS AT LORIA (NANCY), France.
Research Fellow working with France Telecom (CNET) **July 95 - July 97**

INRIA AT LORIA, (NANCY), France.
European research fellowship (HCM) **September 94 - May 95**

COMPUTING SCIENCE DEPARTMENT, UNIVERSITY OF STIRLING, Scotland.
Research Assistant **September 92 - February 94**

RESEARCH INTERESTS: A BRIEF HISTORY (SINCE 1989)

My undergraduate degree was in Maths and Computing Science where I developed my interest in the theory of computing: **computability, complexity, correctness**, etc. . .

In the final year of my undergraduate degree, I worked on a student placement with British Telecom (Research Laboratories, Martlesham) where I researched in the area of **formal methods and object oriented programming**. This led to my first publication[GL89].

After working at BT, I decided to do a PhD on formal methods and OO development[Gib93c, Gib93a, Gib93b].

My first postdoctorate post was in France working with Dominique Méry on the **specification and design of complex systems**[GM95, GM96]. At this point I got interested in the **feature interaction problem**[GM97, GMM97, Gib97, Gib98b, GM98c, GCMM98, GM99b, GHM99, Gib99, GMM99, GHM00].

My work in feature interactions led to research in the area of **unified semantic models for compositional (OO) reasoning about safety and liveness** (at different levels of abstraction)[GM98a, Gib98a, GHS⁺99, GM99a, Gib99, SPG⁺00, HGM00].

This led to the realisation that formal methods should lead to a more **rigorous software engineering** discipline in all parts of the development life cycle[GDM00, SG00, Gib01a, RPG02, CMG03, DMG03, CEB⁺05], with particular importance during requirements engineering.

Throughout my academic career, I emphasise the symbiosis between teaching and research. I have most interest in the **teaching of formal methods**, the problem of **technology transfer** and the adoption of **innovative learning techniques** such as **problem based learning (PBL)**[GM98b, Gib00, Gib03a, Gib03b, TG04a, TG04b, HG05, OG05b, OMGB05, OG05a, TG05a, TBG06, OG06a, OG06b, Gib10, Gib08a, Gib08b, GLR08b, GLR10b, Gib09b, Gib09c, GLR09b, Gib09a].

Most recently I have supervised PhD students in the areas of **models of computation**[WG05b, WG05a, Gib01b] and **E-voting**[GLR08a, GM08, CGM07a, Gib07, CGM07b, CGM06, MG06, Gib05, MG03], where I focus on the complex boundary between (computer science) theory and (software engineering) practice.

I am currently collaborating in an ANR research project SAVE (Sécurité et Audit du Vote Electronique) where I am researching compositional verification of e-voting architectures[GLR08a, GLR10a] against different types of requirements (including security, anonymity, performance, usability, etc. . .). My future research plans include extending the theory of Software Product Lines (SPLs) to incorporate previous research on feature interactions, formal methods and object oriented modelling; with practical application in the development of an e-voting SPL[GLR09a].

The references to my published papers, ordered by theme above, can be found at the end of this CV. In total, I have **8 journal publications** [GLR10b, Gib10, Gib09c, WG08, CGM07b, OG06b, TG05b, GL89], **more than 40 peer-reviewed publications at international conferences**[GLR10a, Gib09a, Gib08b, GLR08a, GM08, GLR08b, Gib07, CGM07a, CGM06, MG06, OG06a, TBG06, OG05b, WG05b, CEB⁺05, WG05a, OG05a, HG05, TG05a, TG04a, TG04b, Gib03a, DMG03, CMG03, Gib00, SPG⁺00, GHM00, HGM00, GDM00, GM99b, Gib99, GMM99, GHM99, GM99a, GHS⁺99, Gib98b, GM98b, GM98a, GM97, Gib97, GMM97, GM96], and **numerous technical reports** [OMGB05, Gib05, Gib03b, MG03, Gib01a, Gib01b, WNG01, Gib98a, GM98c, GCMM98, GM95, Gib93c, Gib93a, Gib93b].

I have also **co-edited 4 conference/workshop proceedings** — *REVOTE09*[GJ09], *PPPJ04*[GPW04], *SAC02*[RPG02] and *IWFM00*[SG00].

RESEARCH EXPERIENCE

DIRECTOR TASS RESEARCH GROUP

From 2002-2005, I was director of the TASS (Theoretical Aspects of Software Systems) research group at NUI Maynooth. In total, TASS raised more than 600k euro in research funding, and supported more than 10 postgraduate researchers.

RESEARCH SUPERVISION/DIRECTION

PHD STUDENTS: COMPLETED

McGaley, Margaret, *E-voting: an immature technology in a critical context*, 2008.

Neary, Turlough, *Small Universal Turing Machines*, 2007.

Woods, Damien, *Computational Complexity of an optical model of computation*, 2005.

PHD STUDENTS: IN PROGRESS

Mac Namara, Damien, *Electronic Voting: Development of a Dual Vote Architecture*.

MSC STUDENTS: COMPLETED

Walsh, Eamonn, *A secure electronic voting system for academic council elections*, 2006.

Kirk, Mark, *A Client Simulator - And Benchmark Suite - To Test Performance of Multithreaded Architectures in Web Services*, 2004.

Phelan, Pat, *Rapid prototyping an educational online game: experimenting with sorting*, 2004

Hallinan, Stephen, *An Examination of the Use of UML in a Spiral Process with Evolving Requirements and the Subsequent Evaluation of the Design Quality*, 2004.

Laird, Gary, *Globalisation, Localisation and Testing of Visual Studio.NET*, 2004.

Galvin, Valerie, *Evolutionary Prototyping and its application in real-world case study*, 2004.

Shanley, Ray, *Design By Contract In Java*, 2003.

Weir, David, *Simulation and Modelling of Traffic Control Flow*, 2003.

Feraille, Matthieu, *Software Engineering Practices At DATA CEP (ALTRAN)*, 2002.

Touzery, Emmanuel, *PCSOFT: managing success*, awarded in 2002.

Honan, Dermot, *Peer to Peer Computing: An evaluation of the benefits when applied to Content Distribution*, 2002.

Perez, Fran, *The Sequence Pattern*, 2002.

Zou, Jianming, *Improving the Software Development Process at Ericsson*, 2002.

Meagher, Anne, *Automated Student Profiling: A Software Engineering Study of Automated Student Profiling for Teaching Programming*, 2001.

Leacy, Helen, *Animating formal specifications: a JAVA GUI*, 1999.

UNDERGRADUATE PLACEMENTS

I have also supervised more than 20 final year projects, and more than 10 student placements (in Ireland and in France).

THESES EXAMINATION

PHD

Dubravka Ilic: *Formal reasoning about Dependability in Model-Driven Development*, awarded by Turku Center for Computer Science, 2007.

Mark Hennesy: *A test-driven development strategy for the construction of grammar-based software*, awarded by NUI Maynooth, 2007.

MPHIL

Paul Stacey *Peer-to-peer Searching and Sharing of Electronic Documents*, awarded by DIT, Ireland, 2005.

MSc

David Tunney: *var-pi: A language based on the pi-calculus*, awarded by DCU, Ireland, 2004.

Aidan Haran: *Collaborative Computer Personalities in the Game of Chess*, awarded DCU, Ireland, 2002.

JOURNALS: REVIEWING AND EDITORIAL COMMITTEES

Since 2008, Paul is on the editorial committee (comité de rédaction) of the *Annals of Telecommunications* (ISSN: **0003-4347**), published by Springer. Furthermore, Paul has acted as reviewer for the following journals:

Annals of Telecommunications ISSN: **0003-4347**.

Automated Software Engineering ISSN: **0928-8910**.

Computer Networks (and ISDN Systems) ISSN: **0169-7552**.

Formal Aspects of Computing ISSN: **0934-5043**.

International Journal of Foundations of Computer Science (IJFCS) ISSN: **0129-0541**.

International Journal of Modelling and Simulation ISSN: **0228-6203**.

Requirements Engineering Journal ISSN: **0947-3602**.

Science of Computer Programming ISSN: **0167-6423**.

Software:Practice and Experience, ISSN: **0038-0644**.

CONFERENCES AND WORKSHOPS: COMMITTEES AND REVIEWING

C: (co)chair, **SC:** Session (co)chair, **OC:** organisation committee, **PC:** programme committee, **R:** reviewer —
2010:

International Conference on Software Engineering Advances (ICSEA10) (**PC, R**)
International Conference on Software and Data Technologies (ICSOFT10) (**PC,R**)
International Conference on Intensive Applications and Services (INTENSIVE 2010) (**PC,R**)
Special Interest Group in Computer Science Education (SIGCSE 2010) (**R**)
From Research to Teaching Formal Methods - The B Method (TFM-B 2010) (**PC,R**)
Telecommunications, Networks and Systems (TNS 2010) (**PC,R**)

2009:

International Conference on Software Engineering Advances (ICSEA09) (**PC, R**)
International Conference on Software and Data Technologies (ICSOFT09) (**PC,R**)
International Conference on Intensive Applications and Services (INTENSIVE 09) (**PC,R**)
Innovation and Technology in Computer Science Education (ITiCSE 2009) (**R**)
Requirements Engineering for E-voting Systems (RE-Vote09) (**C,PC**)
Special Interest Group in Computer Science Education (SIGCSE 09) (**R**)
Telecommunications, Networks and Systems (TNS 2009) (**PC,R**)

2008:

Innovation and Technology in Computer Science Education (ITiCSE 2008) (**R**)
Special Interest Group in Computer Science Education (SIGCSE 08) (**R**)
Int. Symposium on Leveraging Applications of Formal Methods, Verification & Validation (ISoLA2008) (**PC**)
International Conference on Software Engineering Advances (ICSEA08) (**PC, R**)
Telecommunications, Networks and Systems (TNS 2008) (**PC, R**)
International Conference on Software and Data Technologies (ICSOFT08) (**PC,R**)
African Conference on Research in Computer Science & Applied Mathematics (CARF08) (**R**)
Workshop on Formal Methods Education and Training (FMET 2008) (**PC**)

2007:

Special Interest Group in Computer Science Education (SIGCSE 07) (**R**)
Innovation and Technology in Computer Science Education (ITiCSE 2007) (**R**)
International Conference on Software Engineering Advances (ICSEA07) (**PC, R**)
International Conference on Software and Data Technologies (ICSOFT07) (**PC,R**)

2006:

Formal Methods Europe (FM(E)06) (**R**)
International Conference on Software Engineering Advances (ICSEA06) (**PC, R**)
International Conference on Software and Data Technologies (ICSOFT06) (**PC,R**)
Information Technology and Telecommunications Doctoral Symposium (IT&T 2006) (**R**)

2004:

Principles and Practice of Programming in Java (PPPJ04) (**C**)
Foundations : Validation & Verification Workshop (Found04(V&V)) (**PC**)

2003:

Feature Interaction Workshop (FIW03) (**PC,R**)

Principles and Practice of Programming in Java (PPPJ03) (**OC,R**)

2002:

Forum on Specification and Design Languages (FDL02: SFP track) (**R**)

Principles and Practice of Programming in Java (PPPJ02) (**R**)

Symposium on Applied Computing (SAC02 (Soft.Eng. Track)) (**SC**)

Artificial Intelligence and Cognitive Science (AICS02) (**R**)

2001:

Irish Workshops in Formal Methods (IWFM01) (**PC,R**)

Intermediate Representation Engineering for the Java Virtual Machine (IRE2001) (**PC,R**)

Formal Methods for Parallel Programming: Theory & Applications (FMPPTA01) (**R**)

2000:

Irish Workshops in Formal Methods (IWFM00) (**C,OC,PC,R**)

Formal Methods for Parallel Programming: Theory & Applications (FMPPTA00) (**R**)

1999:

Formal Methods Europe (FME 1999) (**R**)

Irish Workshops in Formal Methods (IWFM99) (**PC,R**)

Formal Methods for Parallel Programming: Theory & Applications (FMPPTA99) (**R**)

1998:

Formal Methods for Parallel Programming: Theory & Applications (FMPPTA98) (**R**)

(INTER)NATIONAL PROJECTS: EVALUATION AND REVIEWING

IRELAND

Computer science **panellist** for the Enterprise Ireland Basic Research Grant Programme (2003)

EUROPEAN UNION

Evaluator for European FP6, IST priority 2:

Call 2 — IST-2002-2.3.2.3 — *Open development platforms for software and services*

Call 5 — IST-2005-2.5.5 — *Software and Services*

Portfolio Analysis for European FP6, IST priority 2:

Call 5 — IST-2005-2.5.5 — *Software and Services*

Reviewer for RODIN project (European Union, FP6, IST priority 2).

Evaluator/Rapporteur European Union FP7:

ICT objective 1.2 — *Service and Software Architectures, Infrastructures and Engineering*

FET Proactive, FP7 Call 3 — *ICT Forever Yours*

FET Proactive, FP7 Call 4 — *CO-PI: Co-ordinating Communities, Plans and Actions*

FET Proactive, FP7 Call 4 — *TERACOMP: Concurrent Tera-Device Computing*

FP7 ICT Call 5, Objective 1.2 — *Internet of Services, Software and Virtualisation*

GRANTS RECEIVED

- CNRS Chercheur Associé 2005 — with Dominique Méry, MOSEL research group, INRIA/LORIA, Vanduvre-lès-Nancy, *Les méthodes formelles et le problème du transfert de technologie : la nécessité d'une recherche fondamentale dans la pédagogie du génie logiciel* (**salary from 1st Sept 2005 to 31st August 2006**)
- Enterprise Ireland International Collaboration Research Grant (2005) EI/IC/2005/49 — with Rosemary Monahan and Jackie O'Kelly — between Clemson University and NUIM. *Problem-Based-Learning (PBL) - from theory to practice* (**4500 euro**)
- IRCSET Embark Initiative (2004-2007) — Turlough Neary, J. Paul Gibson. *The boundaries of complexity hierarchies: maximising problem solving potential by using different models of computation* (**57,150 euro**).
- IRCSET Embark Initiative (2003-2006) — Margaret McGaley, J. Paul Gibson. *Electronic voting: An analysis of the safety critical issues* (**57,150 euro**).
- IRCSET Embark Initiative (2003-2006) — Des Traynor, J. Paul Gibson. *The synthesis and analysis of student profile models in adaptive learning environments for teaching computer programming.* (**57,150 euro**)
- IRCSET Embark Initiative (2003-2006) — Ciaran O'Flóinn, J. Paul Gibson. *Formalisation of Cryptographic Metrics and its application to emerging techniques.* (**57,150 euro**)
- IRCSET Embark Initiative (2002-2005) — Aidan Delaney, J. Paul Gibson, Thomas J. Naughton. *Specification of an abstract operating system running on a single stack push down automaton* (**57,150 euro**)
- IRCSET Embark Initiative (2002-2004) — Damien Woods, J. Paul Gibson. *Computational Models and the Turing Limit: An Investigation of the Boundary Between Discrete and Continuous Systems* (**38,100 euro**)
- NUI, Maynooth New Researcher Award (2001) — for supporting the costs incurred by my PhD students when attending conferences and workshops, and visiting overseas research laboratories. (**4,000 Irish pounds**)
- Enterprise Ireland International Collaboration Research Grant IC/2201/061 (2001) — with Rosemary Monahan and James Power — for the establishment of a formal methods alliance between Clemson University and NUIM. (**6,000 Irish pounds**)
- Universite de Metz, Visiting Fellowship (2000) - for collaboration with Dominique Cansell in the application of theorem proving techniques in real world software engineering. (**2,000 Irish pounds**)
- Enterprise Ireland Strategic Research Grant SRG/2000/94 (2000-2003) — NUIM-DCU formal methods group collaboration on the *IMPROVE (IMplementing PROtocol Verification for E-commerce) project* — concerned with security protocol specification and verification (working with Baltimore Technologies Ltd). (**70,500 Irish Pounds**)
- Enterprise Ireland French Collaboration Grant — with Geoff Hamilton (DCU) (1998 — 2000) — to investigate the formal specification of telephone systems, in collaboration with the Model Group at Loria in Nancy, France. (**1,200 Irish pounds * 3**)
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INVITED TALKS

- A compositional approach to modelling and formal verification of e-voting systems.* Presented at: Department of Information Technology, Limerick Insitute of Technology (April 2010).
- A compositional approach to modelling and formal verification of e-voting systems.* Presented at: The Computer science department, Namur, Belgium; to the Precise research group (February 2010).
- Feature Interactions in a Software Product Line for E-voting.* Presented at: The Computer science department, Clemson Univ., SC, USA, to the RSRG research group (September 2009). Co-presenter: Jean-Luc Raffy.
- E-voting verification problems across the world.* Presented at: VETO08 (Workshop sur La sécurité Informatique et le Vote ElecTronique), CIRM, Marseille Luminy, Université de la Méditerranée (March 2008). Co-presenters: Jean-Luc Raffy and Eric Lallet.

Formal methods — never too young to start. Presented at: “To B or in any Event To B” Seminar/Workshop, Nancy, France (December 2007).

E-voting and the need for rigorous software engineering — the past, present and future. Presented at: B2007, Besancon, France (January 2007).

Trust and security in e-voting systems: the verification problem. Presented at: Workshop on Trustworthy Software, Saarland University, Saarbrücken, Germany (May 2006).

Problem-based learning: the Pablo Picasso Approach. Presented for: The Office of Teaching Effectiveness and Innovation, Clemson Univ., SC, USA (May 2006).

E-voting: software engineering and formal methods. Presented at: The Computer science department, Clemson Univ., SC, USA, to the RSRG research group (May 2006).

Le vote électronique, les methodes formelles et les problèmes complexes dus à la sécurité. Presented to: The MOSEL research group, Nancy, France. (March 2006).

PBL — A computer science viewpoint. Presented at: Project and Problem Based Learning in Higher Education, Galway (June 2003). Co-presenters: Jackie O’Kelly and George Mitchell.

The Hunt For Software Engineers - i’ll provide the (silver) bullets if you provide the guns to fire them. Presented at: NUI Maynooth CS Department, Seminar Series (October 2002).

The Complexity of Beauty or the Beauty of Complexity. Presented for: The NUIM Astro-2 (student society) (April 2002).

Fair Objects: Infinity and Beyond. Presented at: Formal Methods Alliance (Clemson University) (January 2002).

An Introduction To Formal Methods. Presented at: Formal Methods Alliance (Clemson University) (January 2002).

Computability, complexity, correctness, and common-sense. Presented at: NUIM Mathematics Seminar (February 2001).

The fractal-like nature of complexity boundaries. Presented at: NUIM-DCU Formal Methods and Security Seminar Series (March 2001).

Software Engineering and Ethics: when code goes bad. Presented for: The NUIM Astro-2 (student society) (March 2001).

The role of computer science in software engineering. Presented at: NUI Maynooth CS Department, Seminar Series (8th May 2000).

Three interesting problems in computer science. Presented at: NUI Maynooth CS Department, Seminar Series (20th November 2000).

Correctness Preserving Transformations for software maintenance (in C++). Presented at: NUI Maynooth CS Department, Seminar Series (25th September 2000). Co-presenters: Prof. Brian Malloy and Dr T Dowling.

Stability issues in formal OO requirements models. Presented at: NUI Maynooth CS Department, Seminar Series (1st November 1999).

TEACHING EXPERIENCE

T&M SUDPARIS(EX. INT EVRY), EVRY, FRANCE (2006 -)

MSC IT (SOFTWARE ENGINEERING)

UML and OOD (2006-2007)

Formal Methods (B) (2006-2007)

Tools for software engineering (2006-2007)

Testing (2006-2007)

MSC SOFTWARE ENGINEERING & AMBIENT INTELLIGENCE

Object oriented development (2010)

Mathematical Foundations (2009)

Software Engineering Foundations (2009)

TELECOM PREMIÈRE ANNÉE

Algorithmique et Programmation (2006-2010)

Introduction à la conception objet illustré avec UML et Java (2006-2010)

Introduction à la Programmation (2008-2010)

Architecture matérielle et logicielle d'un ordinateur (2008-2010)

TELECOM DEUXIÈME ANNÉE

Langages formels et applications (Event-B) (2007-2010)

Projet Informatique (Genie Logiciel) (2008-2010)

Projet système d'information : Réalisation et déploiement (Patrons de conception) (2008-2010)

FORMATION CONTINUE

Filière Architecte technique — Concepts et technologies de développement ((2010)

SUMMER SCHOOL

Designing games : an interactive team project (2007-2010)

NATIONAL UNIVERSITY OF IRELAND, MAYNOOTH, IRELAND (1998 - 2005)

MSC IN SOFTWARE ENGINEERING

Rigorous Software Process (2001-02, 2002-03, 2003-04, 2004-05).

Software Process Improvement (2002-03, 2003-04).

Object Oriented Programming in C++ (2001-02).

BSC IN COMPUTER SCIENCE (& SOFTWARE ENGINEERING)

[4th year]: *Parallel Processing* (1998-99, 2000-01, 2002-03, 2003-04, 2004-05).

[1st and 2nd year]: *Algorithms & Data Structures I & II* (1998-99, 1999-00, 2003-04, 2004-05).

[2nd year]: *Object Oriented Development (I & II)* (2000-01, 2001-02).

[1st and 2nd year]: *Programming Languages (I & II)* (1998-99, 1999-00).

UNIVERSITÉ HENRI POINCARÉ, NANCY I, FRANCE (1995-1998)

At UHP, I lectured in the following subjects:

MASTERS CHIMIE INFORMATIQUE ET THÉORIQUE

Algorithmique, Structures de Données et Programmation (Les objets et classes avec C++).

DESS INGENIERIE MATHMATIQUES ET OUTILS INFORMATIQUES

Génie Logiciel: L'application des méthodes formelles.

INFORMATIQUE CYCLE A

Graphes et Algorithmes.

At UHP, as a teaching assistant, I taught tutorials and practical laboratory sessions in the following subjects:

MALG ESIAL

Calculabilité ; la Théorie du Point Fixe ; Spécifications Algébriques ; Entiers, Combinatoire et Divination.

DEUG INFORMATIQUE SM2

Programmation fonctionnelle (avec CaML).

UNIVERSITY OF STIRLING, STIRLING, SCOTLAND (1989-1993)

As a postgraduate I was involved in teaching tutorials and practical laboratory sessions in the following subjects as part of the BSc in Computer Science:

[1st year]: *Introduction to Computer Science.*

[1st year]: *Introduction to Programming (with Pascal).*

[2nd year]: *Structured Programming (with Modula-2).*

[4th year]: *Functional Programming (with ML).*

[4th year]: *Parallel Systems and Programming (with CSP).*

[4th year]: *Telecommunications and Formal Methods (with LOTOS).*

ADMINISTRATION EXPERIENCE

T&M SUDPARIS(EX. INT EVRY), EVRY

Co-developer of the Master of Science programme *Software Engineering For Smart Devices*

Co-director of the Master of Science programme *Software Engineering And Ambient Intelligence*

Director of the summer school programme *Designing Games: an interactive team project*

Membre du comité de pilotage - Compétences et la Formation en ingénierie Système (Complexe) SYSTEM@TIC
Paris Region

NATIONAL UNIVERSITY OF IRELAND, MAYNOOTH

Acting Head Of Computer Science Department (2005)

Director of Strategic Plan for Research and Teaching - Computer Science Department (2005)

Member of NUIM Academic Council (Sept 2004 - Sept 2005)

NUIM Summer Science Camp Director (2002, 2003, 2004)

Member of NUIM Appeals Board (Sept 2004 - Sept 2005)

Member of NUIM Resources Committee (Sept 2004 - Sept 2005)

Science Faculty Representative on the Engineering Faculty (Sept 2004 - Sept 2005)

MSc Software Engineering Programme Director, Computer Science Department (Sept 1999 - Sept 2003)

Director of International Exchange Students ERASMUS/SOCRATES, Computer Science Department (Sept 1999 - Sept 2003)

Research Seminar Co-ordinator, Computer Science Department (Sept 1999 - Sept 2001)

Technical Report Co-ordinator, Computer Science Department (Sept 2001 - Sept 2003)

Library Departmental Co-ordinator, Computer Science Department (Jan 2001 - Dec 2004).

Programming Contest Organiser, Computer Science Department (2001 - 2004)

(Computer) Science School Visits For Children Aged 5 - 18 (1999 - 2004)

Irish Robocode Contest Co-Organiser (2003 - 2004)

OTHER PROFESSIONAL INFORMATION

PROFESSIONAL MEMBERSHIP

I am a member of the ACM since 2001.

EXPERT ADVISER

I was an expert adviser to the Irish Government's Independent *Commission on Electronic Voting* (see: <http://www.cev.ie/>).

I am on the advisory board for the *Computer Science Unplugged* International Teaching Project (see: <http://csunplugged.com/>)

RESEARCH GROUP MEMBERSHIP

AVERSE (Administration, Validation et sEcurité des Réseaux et SErVICES) as part of L'Unité Mixte de Recherche SAMOVAR (Services répartis, Architectures, MOdélisation, Validation, Administration des Réseaux) UMR 5157 INT CNRS Research Laboratory.

(see: <http://samovar.it-sudparis.eu/equipes/eq-averse.php>)

MOSEL, INRIA/LORIA, Nancy, France.

(see: <http://www.loria.fr/equipes/model/>)

FMA (Formal Methods Alliance), Clemson, USA.

(see: <http://www.cs.clemson.edu/~fmgroup/>)

EXTERNAL EXAMINER

Dublin City University, *BSc in Computer Applications*, (2004 - 2010)

Waterford Institute of Technology (2001 - 2002)

BSc: Applied Computing (Commercial & Industrial), and

BSc: Computing in Commercial Software Development

ACADEMIC REFERENCES: CONTACT DETAILS

The following should be contacted if you require a reference to my teaching or research experience:

- Prof. Dominique Méry, Université Henri Poincaré Nancy 1, Nancy, France. (mery@loria.fr)
 - Prof. Ronan Reilly, NUI Maynooth, Ireland (ronan@cs.nuim.ie)
 - Prof. Steve Stevenson, Clemson University, SC, USA (steve@cs.clemson.edu)
 - Prof. Ken Turner, Stirling University, Scotland (kjt@cs.stir.ac.uk)
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Publications

- [CEB⁺05] Deirdre Carew, Chris Exton, Jim Buckley, Margaret McGaley, and J. Paul Gibson. Preliminary study to empirically investigate the comprehensibility of requirements specifications. In P. Romero, J. Good, E. Acosta Chaparro, and S. Bryant, editors, *Psychology of Programming Interest Group 17th annual workshop (PPIG 2005)*, pages 182–202, University of Sussex, Brighton, UK, 2005.
- [CGM06] Dominique Cansell, J. Paul Gibson, and Dominique Méry. Refinement: A constructive approach to formal software design for a secure e-voting interface. In A. Cerone and P. Curzon, editors, *Formal Methods for Interactive Systems (FMIS 2006)*, Macau SAR China, October 2006.
- [CGM07a] Dominique Cansell, J. Paul Gibson, and Dominique Méry. Formal verification of tamper-evident storage for e-voting. In Mike Hinchey and Tiziana Margaria, editors, *Fifth IEEE International Conference on Software Engineering and Formal Methods (SEFM 2007)*, pages 329–338, London, England, UK, 2007. IEEE Computer Society.
- [CGM07b] Dominique Cansell, J. Paul Gibson, and Dominique Méry. Refinement: A constructive approach to formal software design for a secure e-voting interface. *Electronic Notes in Theoretical Computer Science*, 183:39–55, 2007.
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