

DSG bibliography

December 1, 2011

- [1] Guillermo Álvaro, Stephen Farrell, Tommy Lindberg, Roland Lockhart, and Yunhao Zhang. Xkms working group interoperability status report. In David Chadwick and Gansen Zhao, editors, *Proceedings of the Public Key Infrastructure: Second European PKI Workshop: Research and Applications (EuroPKI 2005)*, volume 3545 of *Lecture Notes in Computer Science*, pages 86–99. Springer-Verlag, June 2005.
- [2] Joerg Abendroth. Applying the pi-calculus to practice: An example of a unified security mechanism. Technical Report RS-03-39, BRICS: Basic Research In Computer Science, November 2003.
- [3] Joerg Abendroth and Christian D.Jensen. Partial outsourcing: A new paradigm for access control. In *Proceeding of the 8th ACM Symposium on Access Control Models and Technologies (SACMAT 2003)*, pages 134–141. ACM Press, June 2003.
- [4] Joerg Abendroth and Christian D.Jensen. A unified security framework for networked applications. In *Proceedings of the Symposium of Applied Computing (SAC2003)*, pages 351–357. ACM Press, March 2003.
- [5] Carlisle Adams and Stephen Farrell. Internet x.509 public key infrastructure certificate management protocols. Request for Comments (RFC) 2510, Internet Engineering Task Force, March 1999.
- [6] Carlisle Adams, Stephen Farrell, Tomi Kause, and Tero Mononen. Internet x.509 public key infrastructure certificate management protocols (cmp). Request for Comments (RFC) 4210, Internet Engineering Task Force, September 2005.
- [7] Johann Andersson, Stefan Weber, Emanuell Cechet, Christian Jensen, and Vinny Cahill. Kaffemik: Supporting a distributed JVM on a single address space architecture. In *Java Virtual Machine Research and Technology Symposium*, April 2001.

- [8] Johann Andersson, Stefan Weber, Emanuell Cechet, Christian Jensen, and Vinny Cahill. Kaffemik - a distributed jvm on a single address space architecture. In *4th International Conference on SCI-based Technology and Research*, October 2001.
- [9] Johann Andersson, Stefan Weber, Christian Jensen, and Vinny Cahill. PEM3 - the policy enhanced memory management model. In *Proceedings of the 3rd International Workshop on Policies for Distributed Systems and Networks (POLICY'02)*, pages 194–197. IEEE Computer Society, June 2002.
- [10] Francisca Antunes, Seán Baker, Brian Caulfield, Mauricio Lopez, and Mark Sheppard. A pragmatic approach for integrating data management and tasks management: Modelling and implementation issues. In *Advances in Database Technology - EDBT '90*, Lecture Notes in Computer Science, pages 422–436, Venice, Italy, March 1990. Springer-Verlag.
- [11] Alfred Arsenault and Stephen Farrell. Securely available credentials - requirements. Request for Comments (RFC) 3157, Internet Engineering Task Force, August 2001.
- [12] Siobhán Clarke Julian Padget Owen Cliffe Athanasios Staikopoulos, Sábastien Saudrais and Marina De Vos. Mutual dynamic adaptation of models and service enactment in alive*. In *Proceedings of the Models@Runtime workshop at Models 2008*, pages 1–10, September 2008.
- [13] Seán Baker. *System Issues in Persistent Programming and OODBMS Integration*. PhD thesis, Department of Computer Science, Trinity College Dublin, July 1992.
- [14] Seán Baker, Vinny Cahill, and Paddy Nixon. Bridging boundaries: CORBA in perspective. *IEEE Internet Computing*, 1(5):52–57, September/October 1997.
- [15] Elisa L. A. Baniassad and Siobhán Clarke. Finding aspects in requirements with theme/doc. In *Workshop on Early Aspects at AOSD 2004*, March 2004.
- [16] Elisa L.A. Baniassad and Siobhán Clarke. Investigating the use of clues for scaling document-level concern graphs. In *Workshop on Early Aspects at OOPSLA 2004*, October 2004.
- [17] Elisa L.A. Baniassad and Siobhán Clarke. Theme: An approach for aspect-oriented analysis and design. In *26th International Conference on Software Engineering (ICSE)*, pages 158–167, May 2004.
- [18] Olivier Barais, Jacques Klein, Benoit Baudry, Andrew Jackson, and Siobhán Clarke. Composing multi-view aspect models. In *ICCBSS*

'08: *Proceedings of the Seventh International Conference on Composition-Based Software Systems (ICCBSS 2008)*, Washington, DC, USA, 2008. IEEE Computer Society. to appear.

- [19] Stephen Barrett and Brendan Tangney. Wilde: a dynamic, post-compilation co-ordination platform for groupware applications. Technical report, Department of Computer Science, Trinity College Dublin, December 1998.
- [20] Stephen Barrett and Brendan Tangney. Aspects - composing CSCW applications. In *O OIS (Object-Oriented Information Systems) '95*, London, December 1995. Springer-Verlag.
- [21] Stephen Barrett, Brendan Tangney, and Vinny Cahill. Constructing distributed groupware systems: a walk on the Wilde side. In Paulo Guedes and Jean Bacon, editors, *Proceedings of the 8th ACM SIGOPS European Workshop*, pages 138–145. ACM Press, September 1998.
- [22] Peter Barron. *Using Stigmergy to Build Pervasive Computing Environments*. PhD thesis, Dept. of Computer Science, Trinity College Dublin, October 2005.
- [23] Peter Barron. A distributed event system for use in mobile environments. masters TCD-CS-1999-61, Department of Computer Science, Trinity College Dublin, September 1999.
- [24] Peter Barron and Vinny Cahill. Yabs: A domain-specific language for pervasive computing based on stigmergy. In *Proceedings of the 5th Conference Generative Programming and Component Engineering (GPCE'06)*, pages 285–294. ACM Press, October 2006.
- [25] Peter Barron and Vinny Cahill. Using stigmergy to co-ordinate pervasive computing environments. In *6th IEEE Workshop on Mobile Computing Systems and Applications (WMCSA 2004)*, pages 62–71. IEEE Computer Society, December 2004.
- [26] Peter Barron, Jessie Dedecker, and Eric Tanter. Proximity is in the eye of the beholder. In Holger Mügge, Éric Tanter, Pascal Cherrier, Jessie Dedecker, Christina Lopes, and Micheal Cebulla, editors, *3rd Workshop on Object Technology for Ambient Intelligence (OT4AmI), co-located at the 21th European Conference on Object-Oriented Programming (ECOOP)*, pages 1–6. Technische Universität Berlin, August 2007.
- [27] Peter Barron, Stefan Weber, Siobhán Clarke, and Vinny Cahill. Experiences deploying an ad-hoc network in an urban environment. In Jon Crowcroft, Marco Conti, and Andrea Passarella, editors, *IEEE ICPS Workshop on Multi-hop Ad hoc Networks: from theory to reality*, pages 103–110. IEEE Computer Society, July 2005.

- [28] Ann Barry. Implementing a query language for a semantic data model. Master's thesis, Department of Computer Science, Trinity College Dublin, Department of Computer Science, Trinity College Dublin, September 1989.
- [29] Ann Barry, Janet Dillon, Marysia Cahill, Seán Baker, Brian Caulfield, and Mark Sheppard. Issues in the implementation of an office information server. In *1991 ESPRIT Conference*. Commission of the European Communities, Luxembourg, 1988.
- [30] Alexandre Bergel. Facets: First class entities for an open dynamic aop language. In *Proceedings of the Open and Dynamic Aspect Languages Workshop*, March 2006.
- [31] Alexandre Bergel, Robert Hirschfeld, Siobhán Clarke, and Pascal Costanza. Aspectboxes - controlling the visibility of aspects. In Joaquim Filipe, Boris Shiskov, and Markus Helfert, editors, *Proceedings of the International Conference on Software and Data Technologies (ICSOFT 2006)*, pages 29–38. INSTICC Press, September 2006.
- [32] Gregory Biegel and Vinny Cahill. A framework for developing mobile, context-aware applications. In *Proceedings of the 2nd IEEE International Conference on Pervasive Computing and Communications (PerCom 2004)*, pages 361–365. IEEE Computer Society, March 2004. concise contribution.
- [33] Gregory Biegel and Vinny Cahill. Sentient objects: Towards middleware for mobile context-aware applications. *ERCIM News*, (54), July 2003.
- [34] Gregory Biegel, Vinny Cahill, and Mads Haahr. A dynamic proxy-based architecture to support distributed java objects in mobile environments. In Robert Meersman and Zahir Tari, editors, *On the Move to Meaningful Internet Systems 2002: CoopIS, DOA, and ODBASE; Confederated International Conferences CoopIS, DOA, and ODBASE 2002 Proceedings*, volume 2519 of *Lecture Notes in Computer Science*, pages 809–826. Springer-Verlag, October–November 2002.
- [35] Bartosz Biskupski, Raymond Cunningham, Jim Dowling, and René Meier. High-bandwidth mesh-based overlay multicast in heterogeneous environments. In *AAA-IDEA '06: Proceedings of the 2nd international workshop on Advanced architectures and algorithms for internet delivery and applications*, page 4, New York, NY, USA, October 2006. ACM Press.
- [36] Bartosz Biskupski, Raymond Cunningham, and René Meier. Improving throughput and node proximity of p2p live video streaming through overlay adaptation. In *International Symposium on Multimedia (ISM 2007)*, pages 245–253. IEEE Press, December 2007.

- [37] Bartosz Biskupski, Jim Dowling, and Jan Sacha. Properties and mechanisms of self-organising MANET and P2P systems. *ACM Transactions on Autonomous and Adaptive Systems (TAAS)*, 2(1):1–34, March 2007.
- [38] Bartosz Biskupski, Marc Schiely, Pascal Felber, and René Meier. Tree-based analysis of mesh overlays for Peer-to-Peer streaming. In René Meier and Sotirios Terzis, editors, *8th IFIP International Conference on Distributed Applications and Interoperable Systems (DAIS'08)*, volume 5053 of *Lecture Notes in Computer Science*, pages 126–139. Springer-Verlag, June 2008.
- [39] Arkaitz Bitorika, Ciaran Mc Goldrick, and Meriel Huggard. Rapid aggregate defence for denial of service attacks. *IEEE Workshop on Monitoring, Attack Detection and Mitigation (MonAM)*, pages 1–6, Toulouse, France, 2007. IEEE.
- [40] Malika Boulkenafed, Barbara Hughes, René Meier, Gregory Biegel, and Vinny Cahill. Providing hard real-time guarantees in context-aware applications: Challenges and requirements. In *4th IEEE International Symposium on Network Computing and Applications (IEEE NCA05)*, pages 119–127. IEEE Computer Society, July 2005.
- [41] Mélanie Bouroche and Vinny Cahill. We don't need to agree to coordinate. In Michael Mock, editor, *Workshop on Dependable Network Computing and Mobile Systems (DNCMS'08)*, pages 47–51, October 2008. Workshop associated with the 27th IEEE Symposium on Reliable Distributed Systems (SRDS 2008).
- [42] Mélanie Bouroche. *Real-Time Coordination of Mobile Autonomous Entities*. PhD thesis, Dept. of Computer Science, Trinity College Dublin, December 2007.
- [43] Mélanie Bouroche and Vinny Cahill. Coordination of autonomous mobile entities. In Boris Koldehofe, editor, *4th MiNEMA Workshop*, pages 59–64, July 2006.
- [44] Mélanie Bouroche, Barbara Hughes, and Vinny Cahill. Building reliable mobile applications with space-elastic adaptation. In *Mobile Distributed Computing workshop (MDC 2006)*, pages 627–632, June 2006.
- [45] Mélanie Bouroche, Barbara Hughes, and Vinny Cahill. Real-time coordination of autonomous vehicles. In *IEEE Conference on Intelligent Transportation Systems (ITSC 06)*, pages 1232–1239, September 2006.
- [46] Shane Brennan and René Meier. Stis: The smart traveller information service. In *The 10th International IEEE Conference on Intelligent Transportation Systems (ITSC'07)*, pages 666–671. IEEE, October 2007.

- [47] Johan Brichau, Maurice Glandrup, Siobhán Clarke, and Lodewijk Bergmans. Advanced separation of concerns. In ákos Frohner, editor, *European Conference on Object-Oriented Programming (ECOOP) Workshop Reader*, volume 2323 of *Lecture Notes in Computer Science*, pages 107–130, London, United Kingdom, June 2001. Springer-Verlag.
- [48] Daire O Broin and Siobhán Clarke. Inka: Using flow to enhance the mobile learning experience. In Pedro Isaías, Piet Kommers, and Inmaculada Arnedillo Sánchez, editors, *IADIS Mobile Learning 2006*, pages 139–146. IADIS Press, July 2006.
- [49] Ciarán Bryce, Paul Couderc, Jean-Marc Seigneur, and Vinny Cahill. Implementation of the SECURE trust engine. In Peter Herrmann, Valérie Issarny, and Simon Shiu, editors, *Third International Conference on Trust Management*, volume 3477 of *Lecture Notes in Computer Science*, pages 397–401. Springer-Verlag, May 2005.
- [50] Garrett Burke. KANGA: A framework for building application specific communication protocols. Master’s thesis, Department of Computer Science, Trinity College Dublin, September 1996.
- [51] John Butler and Stephen Barrett. Providing for change through adaptive object models and autonomous computing techniques. In *Self-adaptability and self management of context-aware systems workshop (SELF)*, at *ICAS’06*. IEEE Computer Society, July 2006.
- [52] Siobhán Byrne. Visualisation of traditional and distributed systems. Master’s thesis, Department of Computer Science, Trinity College Dublin, Department of Computer Science, 1993.
- [53] Vinny Cahill. Tigger: A framework supporting distributed and persistent objects. In Mohamed E. Fayad, Douglas C. Schmidt, and Ralph E. Johnson, editors, *Implementing Application Frameworks: Object-oriented Frameworks at Work*, pages 485–519. Wiley, 1999.
- [54] Vinny Cahill. An overview of the Tigger object-support operating system framework. In Keith G. Jeffery, Jaroslav Král, and Miroslav Bartošek, editors, *SOFSEM ’96: Theory and Practice of Informatics*, volume 1175 of *Lecture Notes in Computer Science*, pages 34–55, Berlin/Heidelberg, November 1996. Springer-Verlag.
- [55] Vinny Cahill. *On The Architecture of a Family of Object-Support Operating Systems*. PhD thesis, Department of Computer Science, Trinity College Dublin, May 1996. 254 pages.
- [56] Vinny Cahill. Flexibility in object-oriented operating systems: A review. Technical Report TCD-CS-96-05, Department of Computer Science, Trinity College Dublin, July 1996.

- [57] Vinny Cahill. OISIN: The design of a distributed object-oriented kernel for Comandos. Master's thesis, Department of Computer Science, Trinity College Dublin, March 1988. 212 pages.
- [58] Vinny Cahill, Seán Baker, Gradimir Starovic, and Chris Horn. The Amadeus GRT - generic runtime support for distributed persistent programming. In Andreas Paepcke, editor, *1993 Conference on Object-Oriented Programming Systems, Languages and Applications (OOPSLA '93)*, pages 144–161. ACM Press, September 1993. Also SIGPLAN Notices 28(10):144–161, October 1993.
- [59] Vinny Cahill, Seán Baker, Brendan Tangney, Chris Horn, and Neville Harris. On object orientation as a paradigm for general purpose distributed operating systems. In *Proceedings of the 5th ACM Workshop on ACM SIGOPS European workshop*, pages 11–17. ACM, September 1992.
- [60] Vinny Cahill, Roland Balter, David Harper, Neville Harris, Xavier Rousset de Pina, and Pedro Sousa. The Comandos distributed application platform. *The Computer Journal*, 37(6):477–486, August 1994.
- [61] Vinny Cahill and Gregory Biegel. Sentient objects for context aware business process management. In *Proceedings of the SAP Innovation Congress*, February 2003.
- [62] Vinny Cahill, Jim Dowling, Tilman Schäfer, and Barry Redmond. Aspect-oriented programming in the Coyote project. In Serge Demeyer and Jan Bosch, editors, *Object-Oriented Technology: ECOOP '98 Workshop Reader*, volume 1543 of *Lecture Notes in Computer Science*, page 438. Springer-Verlag, July 1998.
- [63] Vinny Cahill, Stephen Farrell, and Joerg Ott. Special issue of computer communications on delay and disruption tolerant networking - editorial. *Computer Communications*, 32(16):1685–1686, October 2009. Not peer reviewed.
- [64] Vinny Cahill, Armando Fox, Tim Kindberg, and Brian Noble. Guest editors' introduction: Building and evaluating ubiquitous system software. *IEEE Pervasive Computing*, 3(3):20–21, 2004. Not peer reviewed.
- [65] Vinny Cahill, Elizabeth Gray, Christian Jensen, Jean-Marc Seigneur, Yong Chen, Brian Shand, Nathan Dimmock, Andrew Twigg, Jean Bacon, Colin English, Waleed Wagealla, Sotirios Terzis, and Paddy Nicon. Using trust for secure collaboration in uncertain environments. *IEEE Pervasive Computing*, 2(3):52–61, July–September 2003.
- [66] Vinny Cahill, Christine Hogan, Alan Judge, Darragh O'Grady, Brendan Tangney, and Paul Taylor. Extensible systems - the Tigger approach. In *Proceedings of the 6th workshop on ACM SIGOPS European workshop*, pages 151–153. ACM, September 1994.

- [67] Vinny Cahill, Chris Horn, Andre Kramer, Maurice Martin, and Gradimir Starovic. C** and Eiffel**: Languages for distribution and persistence. In *OSF Micro-kernel Applications Workshop*, 1990.
- [68] Vinny Cahill, Chris Horn, and Gradimir Starovic. Towards generic support for distributed information systems. In L.-F. Cabrera, V. Russo, and M. Shapiro, editors, *Proceedings of the 1st International Workshop on the Object Orientation in Operating Systems*, pages 104–107. IEEE Computer Society, July 1991.
- [69] Vinny Cahill, Chris Horn, Gradimir Starovic, Rodger Lea, and Pedro Sousa. Supporting object oriented languages on the Comandos platform. In *Proceedings of the 1991 ESPRIT Conference*, pages 427–438. Commission of the European Communities, July 1991.
- [70] Vinny Cahill and Andre Kramer. OISIN: Operating system support for objects in a distributed environment. *IEEE Computer Society Technical Committee Newsletter on Operating Systems and Application Environments*, 5(1):4–8, 1991. Also ECOOP/OOPSLA '90 Workshop on Object Orientation in Operating Systems.
- [71] Vinny Cahill and Donal Lafferty. *Learning to Program the Object-Oriented Way with C#*. Springer-Verlag, London, 2002. 626 pages.
- [72] Vinny Cahill, Paddy Nixon, and Fethi Rabhi. Object models for distributed or persistent programming. Technical report, Department of Computer Science, Trinity College Dublin, October 1998.
- [73] Vinny Cahill, Paddy Nixon, Brendan Tangney, and Fethi Rabhi. Object models for distributed or persistent programming. *The Computer Journal*, 40(8):513–527, 1997.
- [74] Vinny Cahill, Aline Senart, Douglas C. Schmidt, Stefan Weber, Anthony Harrington, Barbara Hughes, Kulpreet Singh, and Mélanie Bourroche. The managed motorway: Real-time vehicle scheduling - a research agenda. In *Proceedings of the Ninth ACM SIGMOBILE Workshop on Mobile Computing Systems and Applications (HotMobile 2008)*, pages 43–48. ACM, February 2008.
- [75] Vinny Cahill, Paul Taylor, Gradimir Starovic, Brendan Tangney, and Darragh O'Grady. Supporting the Amadeus platform on UNIX. Technical Report TCD-CS-92-25, Department of Computer Science, Trinity College Dublin, July 1992.
- [76] Vinny Cahill, Paul Taylor, Gradimir Starovic, Brendan Tangney, Darragh O'Grady, Rodger Lea, Christian Jacquemot, Peter Strarup Jensen, Paulo Amaral, Adam Mirowski, James Loveluck, Youcef Laribi, and Xavier Rousset de Pina. Implementing the Comandos virtual machine.

- In Vinny Cahill, Roland Balter, Xavier Rousset de Pina, and Neville Harris, editors, *The COMANDOS Distributed Application Platform*, pages 158–208. Springer-Verlag, December 1993.
- [77] Ricardo Simon Carbajo, Meriel Huggard, and Ciaran Mc Goldrick. An end-to-end routing protocol for peer-to-peer communication in wireless sensor networks. In Sam Michiels and Douglas C. Schmidt, editors, *Sixth Workshop on Middleware for Network Eccentric and Mobile Applications (MiNEMA)*, pages 5–9. ACM, 2008.
 - [78] Michael Carney, Pádraig Cunningham, Jim Dowling, and Ciaran Lee. Predicting probability distributions for surf height using an ensemble of mixture density networks. In Luc De Raedt and Stefan Wrobel, editors, *Proceedings of the 22nd International Conference on Machine Learning*. ACM Press, August 2005.
 - [79] Andrew Carton, Siobhán Clarke, Aline Senart, and Vinny Cahill. Aspect-oriented model-driven development for mobile context-aware computing. In *First Workshop on Software Engineering of Pervasive Computing, Applications, Systems and Environments (SEPCASE 2007), at ICSE'07*. IEEE, May 2007.
 - [80] Andrew Carton, Cormac Driver, Andrew Jackson, and Siobhán Clarke. Model-driven theme/uml. *Transactions on Aspect-Oriented Software Development*, 2008.
 - [81] Yong Chen, Christian Damsgaard Jensen, Elizabeth Gray, Vinny Cahill, and Jean-Marc Seigneur. A general risk assessment of security in pervasive computing. Technical Report TCD-CS-2003-45, Department of Computer Science, Trinity College Dublin, November 2003.
 - [82] Yong Chen, Christian Damsgaard Jensen, Elizabeth Gray, and Jean-Marc Seigneur. Risk probability estimating based on clustering. In *4th Annual IEEE Information Assurance Workshop*, pages 229–233, June 2003.
 - [83] David Clarke and Brendan Tangney. Microeconomic theory applied to distributed systems. Technical Report TCD-CS-93-30, Department of Computer Science, Trinity College Dublin, Trinity College, Dublin, December 1993.
 - [84] Siobhán Clarke. Composing design models: An extension to the UML. In Andy Evans, Stuart Kent, and Bran Selic, editors, *Third International Conference on the Unified Modeling Language (UML)*, volume 1939 of *Lecture Notes in Computer Science*, pages 338–352. Springer-Verlag, October 2000.
 - [85] Siobhán Clarke. Extending standard uml with model composition semantics. *Science of Computer Programming*, 44(1):71–100, July 2002.

- [86] Siobhán Clarke. *Composition of Object-Oriented Software Design Models*. PhD thesis, Dublin City University, January 2001.
- [87] Siobhán Clarke. Designing reusable patterns of cross-cutting behaviour with composition patterns. In *Workshop on Advanced Separation of Concerns, OOPSLA 2000*, April 2000.
- [88] Siobhán Clarke. Extending uml metamodel for design composition. In *Workshop on Multi-Dimensional Separation of Concerns in Object-Oriented Systems, ICSE 2000*, June 2000.
- [89] Siobhán Clarke and Elisa Baniassad. *Aspect-Oriented Analysis and Design. The Theme Approach*. Object Technology Series. Addison-Wesley, Boston, USA, 2005.
- [90] Siobhán Clarke and Vinny Cahill. Roaming: Technologies for a connected society. *IEEE Internet Computing*, 11(2):14–15, 2007. Guest editors introduction to themed issue, not peer reviewed.
- [91] Siobhán Clarke and Cormac Driver. Context-aware trails. *IEEE Computer*, 37(8):97–99, August 2004.
- [92] Siobhán Clarke, William Harrison, Harold Ossher, and Peri Tarr. Designing for evolution with subjects. In *Workshop on Software Change and Evolution, ICSE '99*, May 1999.
- [93] Siobhán Clarke, William Harrison, Harold Ossher, and Peri Tarr. The dimension of separating requirements concerns for the duration of the development lifecycle. In *Workshop on Multi-Dimensional Separation of Concerns in Object-Oriented Systems, OOPSLA '99*, November 1999.
- [94] Siobhán Clarke, William Harrison, Harold Ossher, and Peri Tarr. Separating concerns throughout the development lifecycle. In *Workshop on Aspect-Oriented Programming, ECOOP'99*, page 299, June 1999.
- [95] Siobhán Clarke, William Harrison, Harold Ossher, and Peri Tarr. Subject-oriented design: Towards improved alignment of requirements, design and code, April 1999.
- [96] Siobhán Clarke, William Harrison, Harold Ossher, and Peri Tarr. Subject-oriented design: Support for evolution from the design stage. In *Workshop on Software and Organisation Co-Evolution (SOCE'99), ICSM'99*, August 1999.
- [97] Siobhán Clarke, William Harrison, Harold Ossher, and Peri Tarr. Subject-oriented design: Towards improved alignment of requirements, design and code. In *Object-Oriented Programming, Systems, Languages and Applications (OOPSLA)*, pages 325–337, November 1999.

- [98] Siobhán Clarke and John Murphy. Developing a tool to support aspect-oriented programming principles to the design phase. In Cristina Lopes, Gail Murphy, and Gregor Kiczales, editors, *ICSE '98 Workshop on Aspect-Oriented Programming*, pages 20–22, April 1998.
- [99] Siobhán Clarke and John Murphy. Developing a tool to support composition of the components in a large-scale development. In Bernard Rumpe, Haim Kilov, and Iann Simmonds, editors, *OOPSLA '97 Workshop on Object-Oriented Behavioural Semantics*, pages 51–58, September 1997.
- [100] Siobhán Clarke, John Murphy, and Mark Roantree. Composition of uml design models: A tool to support the resolution of conflicts. In *Object Oriented Information Systems (OOIS)*, pages 462–482. Springer-Verlag, September 1998.
- [101] Siobhán Clarke and Robert J. Walker. Generic aspect-oriented design with theme/uml. In *Aspect-Oriented Software Development*, pages 425–458. Addison-Wesley, Boston, USA, 2005.
- [102] Siobhán Clarke and Robert J. Walker. Towards a standard design language for aosd. In *1st International Conference on Aspect-Oriented Software Development (AOSD)*, pages 113–119, New York, NY, USA, April 2002. ACM Press.
- [103] Siobhán Clarke and Robert J. Walker. Composition patterns: An approach to designing reusable aspects. In *23rd International Conference on Software Engineering (ICSE)*, pages 5–14, Washington, DC, USA, May 2001. IEEE Computer Society.
- [104] Siobhán Clarke and Robert J Walker. Separating crosscutting concerns across the lifecycle: From composition patterns to aspectj and hyper/j. Technical Report TCD-CS-2001-15, Department of Computer Science, Trinity College Dublin, May 2001. also UBC-CS-TR-2001-05, University of British Columbia.
- [105] Aoife Cox. An exploration of the application of software reuse techniques to the location of services in a distributed computing environment. Master's thesis, Department of Computer Science, Trinity College Dublin, Department of Computer Science, September 1994.
- [106] Stephen Crane. Recovery from failure in an object-oriented distributed system. Master's thesis, Department of Computer Science, Trinity College Dublin, 1990.
- [107] Stephen Crane and Brendan Tangney. Failure and recovery in an object-oriented distributed system. Technical Report TCD-CS-91-02, Department of Computer Science, Trinity College Dublin, February 1991.

- [108] Pádraig Cunningham, Niamh Nowlan, Sarah Jane Delany, and Mads Haahr. A case-based approach to spam filtering that can track concept drift. In Lorraine McGinty, editor, *Proceedings of ICCBR-03 Workshop on Long-Lived CBR Systems*, June 2003.
- [109] Raymond Cunningham. Architecture for location independent corba environments. Technical Report TCD-CS-1999-29, Department of Computer Science, Trinity College Dublin, September 1998. MSc dissertation.
- [110] Raymond Cunningham, Bartosz Biskupski, and René Meier. Managing peer-to-peer live streaming applications. In René Meier and Sotirios Terzis, editors, *8th IFIP International Conference on Distributed Applications and Interoperable Systems (DAIS'08)*, volume 5053 of *Lecture Notes in Computer Science*, pages 140–153. Springer-Verlag, June 2008.
- [111] Raymond Cunningham and Vinny Cahill. Time bounded medium access control for ad hoc networks. In Andre Schiper, Roberto Baldoni, and Ravi Prakash, editors, *2nd ACM International Workshop on Principles of Mobile Computing (POMC '02)*, pages 1–8. ACM Press, October 2002. Invited paper, not peer reviewed.
- [112] Raymond Cunningham and Vinny Cahill. System support for smart cars. In *9th ACM SIGOPS European Workshop*, pages 159–164. ACM, September 2000.
- [113] Raymond Cunningham, Jim Dowling, Anthony Harrington, Vinny Reynolds, René Meier, and Vinny Cahill. Self-optimization in a next-generation urban traffic control environment. *ERCIM News - Special: Emergent Computing*, (64):55–56, January 2006.
- [114] Raymond Cunningham, Anthony Harrington, and Vinny Cahill. Middleware for next generation urban traffic control. In *Proceedings of the European Transport Conference (ETC)*, October 2004.
- [115] Eoin Curran and Jim Dowling. Sample: Statistical network link modelling in an on-demand probabilistic routing protocol for ad hoc networks. In *2nd International Conference on Wireless on Demand Network Systems and Service (WONS 2005)*, pages 200–205. IEEE Computer Society, January 2005.
- [116] Dominik Dahlem. Digital rights enforcement for pervasive computing applications. Master's thesis, Department of Computer Science, Trinity College Dublin, October 2005.
- [117] Dominik Dahlem and Jim Dowling Ivana Dusparic. A pervasive application rights management architecture (parma) based on odrl. In Renato Iannella and Susanne Guth, editors, *Proceedings of the First International Open Digital Rights Language (ODRL) Workshop*, pages 46–63, April 2004.

- [118] Dominik Dahlem, David McKitterick, Lotte Nickel, Jim Dowling, Bartek Biskupski, and René Meier. Binding- and port-agnostic service composition using a p2p soa. In Kunal Verma, Amit Sheth, Michal Zaremba, and Christoph Bussler, editors, *International Workshop on Dynamic Web Processes DWP 2005, at ICSOC 2005*, pages 61–72, P.O. Box 218, Yorktown Heights, NY 10598 USA, December 2005. IBM T.J. Watson Research Center.
- [119] Dominik Dahlem, Lotte Nickel, Jan Sacha, Bartosz Biskupski, Jim Dowling, and René Meier. Towards improving the availability of service compositions. In Elizabeth Chang and Farookh Khadeer Hussain, editors, *Proceedings of the Inaugural IEEE International Conference on Digital Ecosystems and Technologies (DEST'07)*, pages 67–70. IEEE, February 2007.
- [120] Donal Daly, Vinny Cahill, and Chris Horn. UNIX and object oriented distributed systems. In *The EUUG Autumn Conference*, pages 265–276. EUUG, September 1989.
- [121] Elizabeth Daly, Alan Gray, and Mads Haahr. On using profiles to create self-organizing peer-to-peer networks. In *First International Workshop on Trust, Security and Privacy for Ubiquitous Computing (TSPUC 2005): Proceedings of World of Wireless Mobile and Multimedia Networks (WoW-MoM 2005)*, pages 588–593. IEEE Computer Society, June 2005.
- [122] Elizabeth Daly and Mads Haahr. Social network analysis for routing in disconnected delay-tolerant manets. In *The 8th ACM International Symposium on Mobile Ad Hoc Networking and Computing, MobiHoc 2007*, pages 32–40. ACM, September 2007.
- [123] Elizabeth. M. Daly and Mads. Haahr. Social network analysis for information flow in disconnected delay-tolerant manets. *IEEE Transactions on Mobile Computing*, 8(5):606–621, 2009.
- [124] Dominique Decouchant, Eddie Finn, Neville Harris, Chris Horn, Sacha Krakowiak, and Michel Riveill. Experience with implementing and using an object oriented distributed system. In *Proceedings of the Workshop on Experiences with Distributed and Multiprocessor Systems*, pages 301–310, Fort Lauderdale, FL, USA, 1989.
- [125] Mark Dineen and Vinny Cahill. Towards an open architecture for real-time traffic information management. In *Proceedings of the 8th World Congress on Intelligent Transport Systems*, September 2001.
- [126] Simon Dobson. A first taste of vanilla. Technical Report TCD-CS-1998-20, Department of Computer Science, Trinity College Dublin, September 1998.

- [127] Simon Dobson. Modular parsers. Technical Report TCD-CS-1998-19, Department of Computer Science, Trinity College Dublin, September 1998.
- [128] Simon Dobson and Brian Matthews. Ionic types. In Elisa Bertoni, editor, *ECOOP 2000 – object-oriented programming*, volume 1850 of *Lecture Notes in Computer Science*. Springer-Verlag, June 2000.
- [129] Simon Dobson and Paddy Nixon. (free) radical programming languages. In *Proceedings of the 5th CaberNet Radicals workshop*, July 1998.
- [130] Simon Dobson, Paddy Nixon, Vincent Wade, Sotirios Terzis, and John Fuller. Vanilla: an open language framework. In *Generative and component-based software engineering*, volume 1799 of *Lecture Notes in Computer Science*. Springer-Verlag, March 2000.
- [131] Pierpaolo Dondio and Stephen Barrett. Application-contained trust: a non-invasive solution based on presumptive reasoning, domain analysis and intuitive trust. In *The 2007 IEEE International Symposium on Ubisafe Computing (UbiSafe-07)*. IEEE, May 2007.
- [132] Pierpaolo Dondio and Stephen Barrett. Computational trust in web content quality: A comparative evaluation on the wikipedia project. *Informatica Journal*, 31(2):151–160, June 2007.
- [133] Pierpaolo Dondio and Stephen Barrett. Presumptive selection of trust evidences. In *6th International Conference on Autonomous Agent and Multi-Agent System (AAMAS 2007)*, May 2007.
- [134] Pierpaolo Dondio, Stephen Barrett, and Stefan Weber. Trust solutions for distributed learning environments. In P. Isaias, editor, *IADIS International Conference on Mobile Learning*, pages 150–155, Lisboa, Portugal, July 2006. IADIS Press.
- [135] Pierpaolo Dondio, Stephen Barrett, and Stefan Weber. Calculating the trustworthiness of wikipedia articles using DANTE methodology. In *IADIS International e-Society Conference*, pages 320–342, Lisbona, Portugal, July 2006. IADIS Press. Winner of best paper award.
- [136] Pierpaolo Dondio, Stephen Barrett, Stefan Weber, and Jean Marc Seigneur. Extracting trust from domain analysis, a study case on the wikipedia project. In L.T. Yang et al., editor, *3rd International Conference on Autonomic and Trusted Computing (ATC 2006) LNCS 4158*, volume 4158 of *Lecture Notes in Computer Science*, pages 362–373. Springer-Verlag, September 2006.
- [137] Pierpaolo Dondio, Luca Longo, and Stephen Barrett. A translation mechanism for recommendations. In *Trust Management II - IFIP International Federation for Information Processing*, pages 87–102. Springer Boston, May 2008.

- [138] Alexis Donnelly. SWEDE: A command language interpreter for an object-based object-oriented system. Master's thesis, Trinity College Dublin, Department of Computer Science, Trinity College, Dublin, October 1987.
- [139] Jim Dowling. *The Decentralised Coordination of Self-Adaptive Components for Autonomic Distributed Systems*. PhD thesis, Department of Computer Science, Trinity College Dublin, October 2004.
- [140] Jim Dowling and Vinny Cahill. The K-Component architecture meta-model for self-adaptive software. In A. Yonezawa and S. Matsuoka, editors, *Proceedings of 3rd International Conference on Metalevel Architectures and Separation of Crosscutting Concerns (Reflection 2001)*, volume 2192 of *Lecture Notes in Computer Science*, pages 81–88. Springer-Verlag, September 2001.
- [141] Jim Dowling and Vinny Cahill. Self-managed decentralised systems using K-Components and collaborative reinforcement learning. In *1st ACM SIGSOFT Workshop on Self-Managed Systems (WOSS '04)*, pages 39–43. ACM, October 2004.
- [142] Jim Dowling and Vinny Cahill. Dynamic software evolution and the K-Component model. In *Workshop on Software Evolution, at OOPSLA 2001*, October 2001.
- [143] Jim Dowling and Vinny Cahill. Building a dynamically reconfigurable minimumCORBA platform with components, connectors and language-level support. In *International Workshop on Reflective Middleware (RM'2000)*, April 2000.
- [144] Jim Dowling, Raymond Cunningham, Eoin Curran, and Vinny Cahill. Building autonomic systems using collaborative reinforcement learning. *The Knowledge Engineering Review*, 21(3):231–238, September 2006.
- [145] Jim Dowling, Raymond Cunningham, Eoin Curran, and Vinny Cahill. Distributed reinforcement learning of autonomic behaviour. In *2nd International Workshop on Self-Adaptive and Autonomic Computing Systems (SAACS'04), at DEXA'04*, August–September 2004. Winner Best Paper Award.
- [146] Jim Dowling, Raymond Cunningham, Eoin Curran, and Vinny Cahill. Collaborative reinforcement learning of autonomic behaviour. In *15th International Workshop on Database and Expert Systems Applications, at DEXA'04*, pages 700–704. IEEE Computer Society, August–September 2004. Winner Best Paper Award.
- [147] Jim Dowling, Raymond Cunningham, Eoin Curran, and Vinny Cahill. Component and system-wide self-* properties in decentralised distributed systems. In *International Workshop on Self-* Properties in Complex Information Systems*, May 2004.

- [148] Jim Dowling, Raymond Cunningham, Anthony Harrington, Eoin Curran, and Vinny Cahill. Emergent consensus in decentralised systems using collaborative reinforcement learning. In Ozalp Babaoglu, Márk Jelasity, Alberto Montresor, Christof Fetzer, Stefano Leonardi, Aad van Moorsel, and Maarten van Steen, editors, *Post-Proceedings of the workshop SELF-STAR: Self-* Properties in Complex Information Systems, Hot Topics in Computer Science*, volume 3460 of *Lecture Notes in Computer Science*, pages 63–80. Springer-Verlag, May 2005.
- [149] Jim Dowling, Eoin Curran, Raymond Cunningham, and Vinny Cahill. Using feedback in collaborative reinforcement learning to adaptively optimize manet routing. *IEEE Transactions on Systems, Man and Cybernetics, Part A*, 35(3):360–372, May 2005.
- [150] Jim Dowling, Dominik Dahlem, and Jan Sacha. Matching distributed systems to their environments using dissipative structures. In *1st International Workshop on Stochasticity in Distributed Systems (Stodis '05)*, December 2005.
- [151] Jim Dowling, Jan Sacha, and Seif Haridi. Improving ice service selection in a p2p system using the gradient topology. In *First IEEE International Conference on Self-Adaptive and Self-Organizing Systems (SASO'07)*, pages 285–288. IEEE, July 2007.
- [152] Jim Dowling, Tilman Schäfer, Vinny Cahill, Peter Haraszti, and Barry Redmond. Using reflection to support dynamic adaptation of system software: A case study driven evaluation. In Walter Cazzola, Robert J. Stroud, and Francesco Tisato, editors, *Reflection and Software Engineering*, volume 1826 of *Lecture Notes in Computer Science*, pages 171–190. Springer-Verlag, June 2000.
- [153] Jim Dowling and Stefan Weber. Self-organized routing in mobile ad hoc networks using sample. *ERCIM News*, (64):56–57, January 2006.
- [154] Elizabeth Drew and Mads Haahr. Lessness: Randomness, consciousness and meaning. In *Proceedings of Consciousness Reframed 2002: 4th International CAiiA-STAR Research Conference*, August 2002.
- [155] Cormac Driver. *An Application Framework for Mobile, Context-Aware Trails*. PhD thesis, Dept. of Computer Science, Trinity College Dublin, April 2007.
- [156] Cormac Driver, Vinny Cahill, and Siobhán Clarke. Separation of distributed real-time embedded concerns with theme/UML. In Ricardo J. Machado, Joao M. Fernandes, Flavio R. Wagner, and Rick Kazman, editors, *The Fifth International Workshop on Model-Based Methodologies for Pervasive and Embedded Software (MOMPES)*, pages 27–33. IEEE Computer Society, April 2008.

- [157] Cormac Driver and Siobhán Clarke. Distributed systems development: Can we enhance evolution using aspectj. In D. Konstantas, M. Leonard, Y. Pigneur, and S. Patel, editors, *9th International Conference on Object-Oriented Information Systems (OOIS)*, volume 2817 of *Lecture Notes in Computer Science*, pages 368–382, Berlin Heidelberg, September 2003. Springer-Verlag.
- [158] Cormac Driver and Siobhán Clarke. An application framework for mobile, context-aware trails. *Pervasive and Mobile Computing*, 4(5):719–736, October 2008.
- [159] Cormac Driver and Siobhán Clarke. Hermes: A software framework for mobile, context-aware trails. In *Workshop on Computer Support for Human Tasks and Activities at Pervasive 2004*, April 2004.
- [160] Cormac Driver and Siobhán Clarke. Hermes: Generic designs for mobile, context-aware trails-based applications. In *Workshop on Context Awareness at MobiSys 2004*, June 2004.
- [161] Cormac Driver, Éamonn Linehan, Siobhán Clarke, Andrew Jackson, Shiu Lun Tsang, and Mike Spence. A framework for mobile, context-aware trails-based applications: Experiences with an application-led approach. In *Workshop on What makes for good application-led research in ubiquitous computing? at Pervasive 2005*, May 2005.
- [162] Cormac Driver, Éamonn Linehan, Mike Spence, Shiu Lun Tsang, Laura Chan, and Siobhán Clarke. Facilitating dynamic schedules for healthcare professionals. In *1st International Conference on Pervasive Computing Technologies for Healthcare*, pages 1–10. IEEE, November 2006.
- [163] Ivana Dusparic. Pervasive application rights management architecture. Master’s thesis, Department of Computer Science, Trinity College Dublin, July 2005.
- [164] Ivana Dusparic and Vinny Cahill. Autonomic management of large-scale critical infrastructures. In *Workshop on Hot Topics in Autonomic Computing, in conjunction with the IEEE International Conference on Autonomic Computing ICAC-08*, pages 1–2, June 2008.
- [165] Ivana Dusparic and Vinny Cahill. Research issues in multiple policy optimization using collaborative reinforcement learning. In *Workshop on Software Engineering for Adaptive and Self-Managing Systems (SEAMS 2007) at ICSE’07*. IEEE, May 2007.
- [166] Ivana Dusparic, Dominik Dahlem, and Jim Dowling. Flexible application rights management in a pervasive environment. In *IEEE International Conference on E-Technology, E-Commerce and E-Service (EEE)*, pages 680–685. IEEE Computer Society, March 2005.

- [167] Ivana Dusparic and Jim Dowling. Mobile software licensing. Technical Report TCD-CS-2003-29, Department of Computer Science, Trinity College Dublin, July 2003.
- [168] Ahmed El-Habbash. *AMOL: Towards Automated Management of Locality*. PhD thesis, Department of Computer Science, Trinity College Dublin, Department of Computer Science, 1993.
- [169] Ahmed El-Habbash, Jane Grimson, and Chris Horn. Towards an efficient management of objects in a distributed environment. In R. Agrawal and D. Bell, editors, *Proceedings of the 2nd symposium on Databases for Parallel and Distributed Systems*, pages 181–190, Dublin, Ireland, July 1990. IEEE, Los Alamitos, CA, USA.
- [170] Ahmed El-Habbash, Neville R. Harris, and Seán Baker. Supporting automated management in distributed persistent object classes. In P. Sadanandan and T. M. Vijayaraman, editors, *Advances in Data Management. Proceedings of the 3rd International Conference on Management of Data - COMAD '91*, pages 347–359, Bombay, India, December 1991. Tata McGraw Hill, New Delhi.
- [171] Ahmed El-Habbash, Neville R. Harris, and Chris Horn. Distributed class management. In *Proceedings of the 2nd International Al-Azhar Engineering Conference*, Cairo, Egypt, December 1991.
- [172] Ahmed El-Habbash, Chris Horn, and Neville Harris. Garbage collection in an object oriented distributed environment. In *Proceedings of the ECOOP/OOPSLA Workshop on Garbage Collection.*, Ottawa, Canada, 1990.
- [173] Derek Fagan and Rene Meier. Highly-dynamic, pervasive monitoring of traffic congestion levels. In Bidisha Ghosh and Roisin Murray, editors, *Conference of the Irish Transport Research Network (ITRN)*, pages 1–8, September 2010.
- [174] D. Fagan and R. Meier. Using context and behavioral patterns for intelligent traffic management. In *1st International Workshop on Context-Aware Middleware and Services (COMSWARE/CAMS 2009)*, pages 61–66. ACM Press, June 2009.
- [175] Patrick Fahy and Siobhán Clarke. Cass: Middleware for mobile, context-aware applications. In *Workshop on Context Awareness at MobiSys 2004*, June 2004.
- [176] Linda Farragher and Simon Dobson. Java Decaffeinated: experiences building a programming language from components. Technical Report TCD-CS-2000-22, Department of Computer Science, Trinity College Dublin, June 2000.

- [177] Stephen Farrell. Domainkeys identified mail demonstrates good reasons to re-invent the wheel. In Andrea S. Atzeni and Antonio Lioy, editors, *EuroPKI 2006 Third European PKI Workshop: theory and practice*, volume 4043 of *Lecture Notes in Computer Science*, pages 145–153. Springer-Verlag, June 2006.
- [178] Stephen Farrell and Vinny Cahill. Evaluating LTP-T: A DTN-friendly transport protocol. In *Third International Workshop on Satellite and Space Communications 2007 (IWSSC '07)*, September 2007.
- [179] Stephen Farrell and Vinny Cahill. *Delay- and Disruption- Tolerant Networking*. Artech house, London, 1st edition, 2006. 246 pages, ISBN 13: 1-59693-063-2.
- [180] Stephen Farrell and Vinny Cahill. LTP-T: A generic delay tolerant transport protocol. Technical Report TCD-CS-2005-69, Department of Computer Science, Trinity College Dublin, December 2005.
- [181] Stephen Farrell, Vinny Cahill, Dermot Geraghty, Ivor Humphreys, and Paul McDonald. When TCP breaks: Delay- and disruption-tolerant networking. *IEEE Internet Computing*, 10(4):72–78, 2006.
- [182] Stephen Farrell and Russell Housley. An internet attribute certificate profile for authorization. Request for Comments (RFC) 3281, Internet Engineering Task Force, April 2002.
- [183] Stephen Farrell and Christian Jensen. A flexible interplanetary internet. In B. Battrock, editor, *Proceedings the 37th ESLAB Symposium, Tools and Technologies for Future Planetary Exploration*, pages 87–94, ESTEC, Noordwijk, The Netherlands, December 2003. ESA Publications Division.
- [184] Stephen Farrell and Christian Jensen. Scaling an interplanetary internet. In S. Kurnaz, F. Ince, and S. Onbasioglu, editors, *Proceedings of the International Conference on Recent Advances in Space Technologies (RAST2003)*, page 448. IEEE Computer Society, November 2003.
- [185] Stephen Farrell and Christian D. Jensen. Trajectory based addressing. In *8th Cabernet Radicals Workshop*, October 2003.
- [186] Stephen Farrell and José Kahan. Using the xml key management specification (and breaking x.509 rules as you go). In Jana Dittmann, Stefan Katzenbeisser, and Andreas Uhl, editors, *Proceedings 9th IFIP International Conference on Communications and Multimedia Security (CMS 2005)*, volume 3677 of *Lecture Notes in Computer Science*, pages 348–357. Springer-Verlag, September 2005. Invited paper.
- [187] Stephen Farrell, Jean-Marc Seigneur, and Christian Damsgaard Jensen. *Security in Exotic Wireless Networks*, volume 193, pages 101–114. IOS Press, 2004. NATO Computer and Systems Sciences Series III Security and Privacy in Advanced Networking Technologies.

- [188] Stephen Farrell and Sean Turner. Reuse of cms content encryption keys. Request for Comments (RFC) 3185, Internet Engineering Task Force, October 2001.
- [189] Stephen Farrell, John Vollbrecht, Pat Calhoun, Leon Gommans, George Gross, Betty de Bruijn, Cees de Laat, Matt Holdrege, and David Spence. Aaa authorization requirements. Request for Comments (RFC) 2906, Internet Engineering Task Force, August 2000.
- [190] Eddie Finn. The implementation of virtual memory for a distributed operating system. Master's thesis, Department of Computer Science, Trinity College Dublin, February 1990.
- [191] Adrian Fitzpatrick, Gregory Biegel, Siobhán Clarke, and Vinny Cahill. Towards a sentient object model. In *OOPSLA 2002 Workshop on Engineering Context-Aware Object-Oriented Systems and Environments (ECOOSE)*, November 2002.
- [192] Serena Fritsch, Jenny Munnely, and Siobhán Clarke. Towards a domain specific aop language for ubiquitous computing. In *Open and Dynamic Aspect Languages Workshop (ODAL 2006)*, at *AOSD 2006*, March 2006.
- [193] Serena Fritsch, Aline Senart, and Siobhán Clarke. Addressing dynamic contextual adaptation with a domain-specific language. In *First Workshop on Software Engineering of Pervasive Computing, Applications, Systems and Environments (SEPCASE 2007)*, at *ICSE'07*. IEEE, May 2007.
- [194] Serena Fritsch, Aline Senart, Douglas C. Schmidt, and Siobhan Clarke. Scheduling time-bounded dynamic software adaptation. In *Workshop on Software Engineering for Adaptive and Self-Managing Systems (SEAMS)*, at *ICSE 2008*, pages 89–96. ACM, May 2008.
- [195] Serena Fritsch, Aline Senart, Douglas C. Schmidt, and Siobhan Clarke. Time-bounded adaptation for automotive system software. In *IEEE International Conference on Software Engineering (ICSE) Automotive Track*, pages 571–580. ACM, May 2008.
- [196] Lidia Fuentes, Daniel Jimenez, and René Meier. Implementation of an ami communication service using a federated event system based on aspects. In *1st International Workshop on Software Engineering of Pervasive Services (IEEE ICPS/SEPS'06)*, June 2006.
- [197] Lidia Fuentes, Daniel Jimenez, and René Meier. Modelling event systems for ami applications using an aspect middleware platform. In *2nd International Workshop on Ubiquitous Computing & Ambient Intelligence (wUCAmi 2006)*, pages 9–18, November 2006.
- [198] Gregor Gaertner and Vinny Cahill. Understanding link quality in 802.11 mobile ad hoc networks. *IEEE Internet Computing*, 8(1):55–60, January/February 2004.

- [199] Gregor Gaertner, Eamonn O’Nuallain, Andrew Butterly, Kulpreet Singh, and Vinny Cahill. 802.11 link quality and its prediction - an experimental study. In *IFIP TC6 9th International Conference on Personal Wireless Communications (PWC 2004)*, volume 3260 of *Lecture Notes in Computer Science*, pages 147–163. Springer-Verlag, September 2004.
- [200] Gregor Gaertner, Eamonn O’Nuallain, and Vinny Cahill. Extending wireless network simulators to support realistic simulations of 802.11 manets. In *Proceedings of the 4th International Conference on Wireless Communications, Networking and Mobile Computing 2008 (WICOM ’08)*, October 2008.
- [201] Darren Galpin, Cormac Driver, and Siobh  n Clarke. Modelling hardware verification concerns specified in the e language: An experience report. In *International Conference on Aspect-Oriented Software Development (AOSD) Industry Track*, mar 2009.
- [202] Pawel Garbacki, Bartosz Biskupski, and Henri Bal. Transparent fault tolerance for grid applications. In Peter M. A. Sloot, Alfons G. Hoekstra, Thierry Priol, Alexander Reinefeld, and Marian Bubak, editors, *Proceedings of the European Grid Conference (EGC 2005)*, volume 3470 of *Lecture Notes in Computer Science*, pages 671–680. Springer-Verlag, February 2005.
- [203] S. Garcia-Esparza and R. Meier. Jxta-sim: Simulating the jxta search algorithm. In *IEEE International Symposium on Distributed Computing and Artificial Intelligence 2010 (DCAI 2010): Springer Verlag - Advances in Intelligent and Soft Computing*, 2010.
- [204] D. J. Gilmurray. SDE - A language independent syntax-directed editor. Master’s thesis, Department of Computer Science, Trinity College Dublin, Department of Computer Science, 1989.
- [205] Mark Gleeson and Stefan Weber. Strengthening real-time communication support in wireless networks. In Samarjit Chakraborty, editor, *Proceedings Work in Progress Session of the 19th Euromirco Conference on Real-Time Systems (ECRTS 2007)*, pages 41–45, Sankt Augustin, Germany, July 2007. Euromirco Technical Committee on Real-Time Systems.
- [206] Mark Gleeson and Stefan Weber. Towards optimised retransmission reservation in real-time wireless tdma. In Eduardo Tovar and Jean-Dominique Decotignie, editors, *8th Intl. Workshop on Real Time Networks*, volume 8, Dublin, Ireland, July 2009. to appear.
- [207] Ciaran Mc Goldrick, Michael Clear, Ricardo Simon Carbajo, Karsten Fritsche, and Meriel Huggard. Tinytorrents - integrating peer-to-peer and wireless sensor networks. In *Wireless On-Demand Network Systems and Services, 2009. WONS 2009. Sixth International Conference on*,

pages 119–126. IEEE, 2009. INSPEC Accession Number: 10545499;DOI: 10.1109/WONS.2009.4801851.

- [208] Ciaran Mc Goldrick and Meriel Huggard. Building blocks of collaborative learning. *The Engineers Journal*, 57(10):44–45, 2003.
- [209] Ciaran Mc Goldrick and Meriel Huggard. Peer learning with lego mindstorms. In *Frontiers in Education (FIE)*, pages S2F–24–9 Vol. 3. IEEE, 2004. ISSN: 0190-5848;INSPEC Accession Number: 8436605;DOI: 10.1109/FIE.2004.1408740.
- [210] Don Goodeve, Simon Dobson, Jonathan Nash, John Davy, Peter Dew, Mourad Kara, and Chris Wadsworth. Towards a model for shared data abstraction with performance. *Journal of Parallel and Distributed Computing*, 49(1):156–167, 1998.
- [211] Yvon Gourhant. An object-oriented approach for replication management. In *WMRD-II*, Monterey, CA, USA, July 1992.
- [212] Yvon Gourhant, Sylvain Louboutin, Vinny Cahill, Andrew Condon, Gradimir Starovic, and Brendan Tangney. Dynamic clustering in an object-oriented distributed system. In *Proceedings of OLDA-II (Objects in Large Distributed Applications)*, pages 56–62, October 1992.
- [213] Brendan Gowing. *A Reflective Programming Model and Language for Dynamically Modifying Compiled Software*. PhD thesis, Department of Computer Science, Trinity College Dublin, October 1997.
- [214] Brendan Gowing and Vinny Cahill. Meta-object protocols for C++: The Iguana approach. In *Proceedings of Reflection '96*, pages 137–152, April 1996.
- [215] Brendan Gowing and Vinny Cahill. Making meta-object protocols practical for operating systems. In *4th International Workshop on Object Orientation in Operating Systems*, pages 52–55. IEEE Computer Society Press, August 1995.
- [216] Simone Grassi and Stephen Barrett. Dynamic architecture adaptation in ws environment. In *International conference on Autonomic and Autonomous Systems (ICAS'06)*, page 26. IEEE Computer Society, July 2006.
- [217] Simone Grassi, Stephen Barrett, and Francesco Sordillo. Ontology based algorithm modeling: obtaining adaptation for SOA environment. In *MW4SOC '07: Proceedings of the 2nd workshop on Middleware for service oriented computing*, pages 18–23. ACM, November 2007.
- [218] Elizabeth Gray. *A Trust-Based Reputation Management System*. PhD thesis, Dept. of Computer Science, Trinity College Dublin, April 2006.

- [219] Elizabeth Gray, Paul O’Connell, Christian Jensen, Stefan Weber, Jean-Marc Seigneur, and Chen Yong. Towards a framework for assessing trust-based admission control in collaborative ad hoc applications. Technical Report TCD-CS-2002-66, Department of Computer Science, Trinity College Dublin, December 2002.
- [220] Elizabeth Gray, Jean-Marc Seigneur, Yong Chen, and Christian Damsgaard Jensen. Trust propagation in small worlds. In *First International Conference on Trust Management*, pages 239–254, May 2003.
- [221] Richard Greenane and Simon Dobson. Integrating LONWorks into an open systems control environment. Presented at the LONWorks’99 trade conference, October 1999.
- [222] Christin Groba and Siobhan Clarke. Web services on embedded systems - a performance study. In *Pervasive Computing and Communications Workshops (PERCOM Workshops), 2010 8th IEEE International Conference on*, pages 726 –731. IEEE, 2010.
- [223] Distributed Systems Group. Amadeus installation and maintenance guide (Amadeus v2.0). Technical Report TCD-CS-92-02, Department of Computer Science, Trinity College Dublin, February 1992.
- [224] Distributed Systems Group. C** programmer’s guide (Amadeus v2.0). Technical Report TCD-CS-92-03, Department of Computer Science, Trinity College Dublin, February 1992.
- [225] Distributed Systems Group. Overview of the Amadeus project (Amadeus v2.0). Technical Report TCD-CS-92-01, Department of Computer Science, Trinity College Dublin, February 1992.
- [226] Mads Haahr. Information jockey: The dubious role of the 21st-century academic. *Southern Review: Communication, Politics and Culture*, 35(2), August 2002.
- [227] Mads Haahr. Implementation and evaluation of scalability techniques in the eco model. Master’s thesis, Department of Computer Science, Trinity College Dublin, January 1999.
- [228] Mads Haahr, Vinny Cahill, and Eric Jul. Interfacing real and virtual environments. In Ana Moreira and Serge Demeyer, editors, *Object-Oriented Technology: ECOOP ’99 Workshop Reader*, volume 1743 of *Lecture Notes in Computer Science*, pages 84–86. Springer-Verlag, June 1999.
- [229] Mads Haahr, Vinny Cahill, and Eric Jul. Real + Virtual = Clever: Thoughts on programming smart environments. In Paddy Nixon, Gerard Lacey, and Simon Dobson, editors, *The 1st International Workshop on Managing Interactions in Smart Environments*, pages 175–186. Springer-Verlag, December 1999.

- [230] Mads Haahr, Raymond Cunningham, and Vinny Cahill. Towards a generic architecture for mobile object-oriented applications. In *IEEE Globecom 2000 Workshop on Service Portability and Virtual Customer Environments (SerP-2000)*, pages 91–96. IEEE, December 2000.
- [231] Mads Haahr, Raymond Cunningham, and Vinny Cahill. Supporting CORBA applications in a mobile environment. In *the 5th ACM/IEEE International Conference on Mobile Computing and Networking (MobiCom '99)*, pages 36–47. ACM, August 1999.
- [232] Mads Haahr, René Meier, Paddy Nixon, Vinny Cahill, and Eric Jul. Filtering and scalability in the ECO distributed event model. In *International Symposium on Software Engineering for Parallel and Distributed Systems (PDSE 2000)*, pages 83–95. IEEE Computer Society, June 2000.
- [233] Anthony Harrington and Vinny Cahill. Route profiling - putting context to work. In Hisham Haddad, Andrea Omicini, Roger L. Wainwright, and Lorie M. Liebrock, editors, *Proceedings of the 19th ACM Symposium on Applied Computing (Ubiquitous Computing Applications track)*, pages 1567–1573. ACM Press, March 2004.
- [234] Anthony Harrington and Vinny Cahill. Domain modelling for ubiquitous computing applications. In *21st International Conference on Advanced Information Networking and Applications Workshops, 2007, AINAW '07*, pages 326–333. IEEE, May 2007.
- [235] Colin Harris. *Context-Aware Power Management*. PhD thesis, Dept. of Computer Science, Trinity College Dublin, September 2006.
- [236] Colin Harris and Vinny Cahill. An empirical study of the potential for context-aware power management. In *UbiComp 2007: Ubiquitous Computing*, volume 4717 of *Lecture Notes in Computer Science*, pages 235–252. Springer-Verlag, September 2007.
- [237] Colin Harris and Vinny Cahill. Exploiting user behaviour for context-aware power management. In *International Conference On Wireless and Mobile Computing, Networking and Communications*, pages 122–130. IEEE Computer Society, August 2005. poster session.
- [238] Colin Harris and Vinny Cahill. Power management for stationary machines in a pervasive computing environment. In *38th Annual Hawaii International Conference on System Sciences (HICSS'05)*, page 285a. IEEE Computer Society, January 2005.
- [239] Christine Hogan. The Tigger Cub Nucleus. Master's thesis, Department of Computer Science, Trinity College Dublin, September 1994.
- [240] Chris Horn. Is object orientation a good thing for distributed systems? In *Workshop on Distributed Operating Systems*, 1989.

- [241] Chris Horn. An object oriented model for distributed processing. In *EUTECO*, Vienna, 1988.
- [242] Chris Horn and Vinny Cahill. Supporting distributed applications in the Amadeus environment. *Computer Communications*, 14(6):358–365, July/August 1991.
- [243] Chris Horn and Alexis Donnelly. Architectural aspects of the Comandos platform. In *Proceedings of the 2nd Workshop on Distribution and Objects*, Karlsruhe, Germany, April 1989.
- [244] Chris Horn and Sacha Krakowiak. Object-oriented architecture for distributed office systems. In *ESPRIT'87: Achievements and Impact*, pages 1490–1500. Elsevier Science Publishers, Amsterdam, September 1987.
- [245] Chris Horn, Andreas Ness, and Friedeman Reim. Construction and management of distributed office systems. In H.-J. Bullinger, E. N. Protonotarios, D. Bouwhuis, and F. Reim, editors, *EURINFO '88: First European Conference on Information Technology for Organisational Systems*, pages 378–385, Athens, Greece, 1988. Elsevier Science Publishers, Amsterdam.
- [246] Meriel Huggard and Ciaran Mc Goldrick. Formalising research methods for graduate programs in computer science. In *Frontiers In Education Conference - Global Engineering: Knowledge Without Borders, Opportunities Without Passports (FIE)*, pages S4G–16–S4G–20. IEEE, 2007. IEEE Catalog Number: 07CH37888C;Library of Congress: 79-640910;ISSN: 0190-5848;DOI: 10.1109/FIE.2007.4418118.
- [247] Meriel Huggard and Ciaran Mc Goldrick. Computer experience - enhancing engineering education. In *International Conference on Engineering Education (ICEE)*, pages T4C–21 – T4C–25. INEER, 2006.
- [248] Meriel Huggard and Ciaran Mc Goldrick. Incentivising students to pursue computer science programmes. In *Frontiers in Education Conference (FIE)*, pages 3–8. IEEE, 2006. IEEE Catalog Number: 06CH37781C;Library of Congress: 79-640910;ISSN: 0190-5848;DOI: 10.1109/FIE.2006.322678.
- [249] Meriel Huggard and Ciaran Mc Goldrick. Practical positioning projects: Location based services in the laboratory. In *Frontiers in Education (FIE)*, pages S3F–1. IEEE, 2005. IEEE Catalog Number: 05CH37667;Library of Congress: 79-640910;ISSN: 0190-5848.
- [250] Meriel Huggard, Mathieu Robin, Arkaitz Bitorika, and Ciaran Mc Goldrick. Performance evaluation of fairness-oriented active queue management schemes. In Doug DeGroot, Peter G. Harrison, Harry A. G. Wijshoff, and Zary Segall, editors, *Modeling, Analysis, and Simulation of Computer and Telecommunications Systems (MASCOTS)*, pages 105–112. IEEE Computer Society, 2004. DOI: 10.1109/MASCOT.2004.1348187.

- [251] Barbara Hughes. Hard real-time communication for mobile ad hoc networks. Technical report, Dept. of Computer Science, Trinity College Dublin, October 2006.
- [252] Barbara Hughes and Vinny Cahill. Wireless communication using real-time extensions to the linux network subsystem. Technical Report TCD-CS-2006-57, Dept. of Computer Science, Trinity College Dublin, October 2006.
- [253] Barbara Hughes and Vinny Cahill. Achieving real-time guarantees in mobile wireless ad hoc networks. In *Proceedings of the 24th IEEE Real-Time Systems Symposium Work-in-progress Session (RTSS'03)*, pages 37–40. IEEE, December 2003.
- [254] Barbara Hughes and Vinny Cahill. Towards real-time event-based communication in mobile ad hoc wireless networks. Technical Report TCD-CS-2003-25, Department of Computer Science, Trinity College Dublin, June 2003.
- [255] Barbara Hughes and Vinny Cahill. Towards real-time event-based communication in mobile ad hoc wireless networks. In *Proceedings of 2nd International Workshop on Real-Time LANS in the Internet Age (RTLIA '03) at ECRTS'03*, pages 77–80, July 2003.
- [256] Barbara Hughes, Mark Gleeson, Marcin Karpinski, Raymond Cunningham, and Vinny Cahill. Real-time communication in iee 802.11 mobile ad hoc networks a feasibility study. Technical Report TCD-CS-2006-55, Dept. of Computer Science, Trinity College Dublin, September 2006.
- [257] Barbara Hughes, René Meier, Raymond Cunningham, and Vinny Cahill. Towards real-time middleware for vehicular ad hoc networks. In *First ACM International Workshop on Vehicular Ad Hoc Networks (VANET 2004)*, pages 95–96. ACM, October 2004. poster session.
- [258] Andrew Jackson, Olivier Barais, Jean-Marc JÃ?z A?quel, and SiobhÃ?n Clarke. Toward a generic and extensible merge operator. In *Models and Aspects workshop, at ECOOP 2006*, July 2006. to appear.
- [259] Andrew Jackson and Siobhán Clarke. Sourceweave.NET: Source-level cross-language aspect-oriented programming. In G. Karsai and E. Visser, editors, *In Proceedings of the Third International Conference on Generative Programming and Component Engineering (GPCE)*, volume 3286 of *Lecture Notes in Computer Science*, pages 115–134. Springer-Verlag, October 2004.
- [260] Andrew Jackson and Siobhan Clarke. Towards the integration of theme/uml and jpdds. In *Aspect Oriented Modelling workshop, at AOSD 06*, Bonn, Germany, 2006. to appear.

- [261] Andrew Jackson and Siobhán Clarke. Towards a generic aspect-oriented design process. In *7th International Workshop on Aspect-Oriented Modeling (AOM 2005), MoDELS 2005*, October 2005. winner best paper.
- [262] Andrew Jackson, Jacques Klein, Benoit Baudry, and Siobhan Clarke. Kertheme: Testing aspect oriented models. In *ECMDA workshop on Integration of Model Driven Development and Model Driven Testing*, Bilbao, Spain, July 2006. to appear.
- [263] Andrew Jackson, Jacques Klein, Benoit Baudry, and Siobhán Clarke. Testing executable themes. In *Models and Aspects workshop, at ECOOP 2006*, Nantes, France, July 2006. to appear.
- [264] Andrew Jackson, Pablo Sánchez, Lidia Fuentes, and Siobhan Clarke. Towards traceability between ao architecture and ao design. In *Workshop Proceeding of Early Aspects 2006: Traceability of Aspects in the Early Life Cycle. March 20, 2006, Bonn, Germany*, pages 33–40, February 2006. to appear.
- [265] Andrew Jackson, Shiu Lun Tsang, Alan Gray, Cormac Driver, and Siobhán Clarke. Behind the rules: XP experiences. In *IEEE Agile Development Conference (ADC'04)*, pages 87–94. IEEE, June 2004.
- [266] Jelco Jager. Object evolution. Master's thesis, Faculteit der Informatica, Universiteit Twente, Holland, November 1991.
- [267] Christian Jensen and Mads Haahr. Towards a security framework for ad hoc applications. In *Proceedings of the 2nd Workshop in Distributed Object Security, at OOPSLA '99*, pages 19–24, November 1999.
- [268] Christian Damsgaard Jensen. Secure collaboration in global computing systems. *ERCIM News*, 49:34–35, April 2002.
- [269] Alan Judge. *Supporting application-consistent distributed shared objects*. PhD thesis, Department of Computer Science, Trinity College Dublin, October 1996.
- [270] Alan Judge and Vinny Cahill. Sharing objects in a distributed system. In *3rd International Workshop on Object-Oriented Systems in Operating Systems*, pages 136–142. IEEE Computer Society Press, December 1993.
- [271] Alan Judge, Paddy Nixon, Vinny Cahill, Brendan Tangney, and Stefan Weber. Overview of distributed shared memory. Technical report, Department of Computer Science, Trinity College Dublin, October 1998.
- [272] Alan Judge, Paddy Nixon, Brendan Tangney, Stefan Weber, and Vinny Cahill. Distributed shared memory. In Rajkumar Buyya, editor, *High Performance Cluster Computing: Architectures and Systems*, volume 1, pages 409–438. Prentice Hall, 1999.

- [273] Marcin Karpiński and Vinny Cahill. Stream-based macro-programming of wireless sensor, actuator network applications with sosna. In *DMSN '08: Proceedings of the 5th workshop on Data management for sensor networks*, pages 49–55. ACM, August 2008.
- [274] Marcin Karpinski and Vinny Cahill. High-level application development is realistic for wireless sensor network. In *Proceedings of Fourth Annual IEEE Communications Society Conference on Sensor, Mesh and Ad Hoc Communications and Networks SECON 2007*, pages 1–10. IEEE, June 2007.
- [275] Marcin Karpinski, Aline Senart, and Vinny Cahill. Sensor networks for smart roads. In *Proceedings of the Second IEEE International Workshop on Sensor Networks and Systems for Pervasive Computing (PerSeNS'06)*, pages 306–310, March 2006.
- [276] John Keeney. *Completely Unanticipated Dynamic Adaptation of Software*. PhD thesis, Department of Computer Science, Trinity College Dublin, May 2005. Supervisor: Prof. Vinny Cahill. Partly funded by Microsoft Research Limited.
- [277] John Keeney and Vinny Cahill. Chisel: A policy-driven, context-aware, dynamic adaptation framework. In *Proceedings of the 4th IEEE International Workshop on Policies for Distributed Systems and Networks (Policy 2003)*, pages 3–14. IEEE, June 2003.
- [278] John Keeney, Vinny Cahill, and Mads Haahr. Techniques for dynamic adaptation of mobile services. In *The Handbook of Mobile Middleware*, pages 363–384. Auerbach Publications, October 2006.
- [279] Warren Kenny and Stefan Weber. Apsalar - ad hoc protocol for service-aligned location aware routing. In *The 1st International Workshop on Context-Aware Middleware and Services (CAMS 2009)*, 2009.
- [280] Marc-Olivier Killijian, Raymond Cunningham, René Meier, Laurent Mazare, and Vinny Cahill. Towards group communication for mobile participants. In *ACM Workshop on Principles of Mobile Computing (POMC'2001)*, pages 75–82, August 2001.
- [281] Andre Kramer. The design and implementation of the OISIN runtime. Master's thesis, Department of Computer Science, Trinity College Dublin, September 1989.
- [282] Donal Lafferty. *Aspect-Based Properties*. PhD thesis, Dept. of Computer Science, Trinity College Dublin, October 2004.
- [283] Donal Lafferty and Vinny Cahill. Language independent aspect-oriented programming. In *Proceedings of the 18th ACM SIGPLAN Conference on Object-Oriented Programming Systems, Languages and Applications (OOPSLA 2003)*, pages 1–12. ACM Press, October 2003.

- [284] D. Lee and R. Meier. A hybrid approach to context modeling in large-scale pervasive computing environments. In *The Fourth International Conference on COMMunication System softWARE and middlewaRE (COM-SWARE 2009)*. ACM Press, June 2009.
- [285] Deirdre Lee and René Meier. Primary-context model and ontology: A combined approach for pervasive transportation services. In *First International Workshop on Pervasive Transportation Systems (PerTrans '07)*, pages 419–424. IEEE Computer Society, March 2007.
- [286] Éamonn Linehan, Cormac Driver, and Siobhán Clarke. Route generation for adaptable trails-based applications. In *3rd Uk-UbiNet Workshop on Designing, Evaluating and using Ubiquitous Computing Systems*, February 2005.
- [287] Yu Liu and René Meier. Feature interaction in pervasive computing systems. *Electronic Communications of the EASST*, 11, June 2008.
- [288] Yu Liu and René Meier. Feature interaction in pervasive computing systems. In Romain Rouvoy, Mauro Caporuscio, and Michael Wagner, editors, *First International DisCoTec Workshop on Context-aware Adaptation Mechanisms for Pervasive and Ubiquitous Services (CAMPUS 2008)*. University of Oslo, Department of Informatics, June 2008. Technical report no.374.
- [289] Yu Liu and René Meier. Resource-aware contracts for addressing feature interaction in dynamic adaptive systems. In *2009 Fifth International Conference on Autonomic and Autonomous Systems*. IEEE Computer Society Press, 2009.
- [290] Luca Longo and Stephen Barrett. A context-aware approach based on self-organizing maps to study web-users' tendencies from their behaviour. In *CAMS '09: Proceedings of the 1st International Workshop on Context-Aware Middleware and Services*, pages 12–17, New York, NY, USA, 2009. ACM.
- [291] Luca Longo, Stephen Barrett, and Pierpaolo Dondio. Toward social search: from explicit to implicit collaboration to predict users' interests. In Joaquim Filipe and Jose Cordeiro, editors, *Proceedings of the Fifth International Conference on Web Information Systems and Technologies*, pages 693–696. Insticc Press, 2009.
- [292] Luca Longo, Pierpaolo Dondio, and Stephen Barrett. Temporal factors to evaluate trustworthiness of virtual identities. In *Security and Privacy in Communications Networks and the Workshops, 2007. SecureComm 2007. Third International Conference on security and privacy in communication networks*, pages 11–19. IEEE Computer Society Press, 2007.

- [293] Sylvain Louboutin. *A Reactive Approach to Comprehensive Global Garbage Detection*. PhD thesis, Department of Computer Science, Trinity College Dublin, May 1997.
- [294] Sylvain Louboutin and Vinny Cahill. On comprehensive global garbage detection. In *European Research Seminar on Advances in Distributed Systems (ERSADS '95)*, pages 208–213, Grenoble, April 1995. INRIA/IMAG.
- [295] Sylvain Louboutin and Vinny Cahill. Lazy, per cluster log-keeping mechanism for global garbage detection on Amadeus. Technical Report TCD-CS-95-13, Department of Computer Science, Trinity College Dublin, Dublin 2, Ireland, May 1995.
- [296] Sylvain Louboutin and Vinny Cahill. A lazy log-keeping mechanism for comprehensive global garbage detection on Amadeus. In *International Conference on Object Oriented Information Systems (OOIS'95)*, pages 118–132. Springer-Verlag, December 1995.
- [297] Sylvain R. Y. Louboutin and Vinny Cahill. Comprehensive distributive garbage detection by tracking causal dependencies of relevant mutator events. In *The 17th International Conference on Distributed Computing Systems (ICDCS)*, pages 516–525. IEEE Computer Society Press, May 1997.
- [298] Fergus Lynch. Parallel programming in DUMPS. Master's thesis, Department of Computer Science, Trinity College Dublin, 1990.
- [299] Carina Markett, Inmaculada Arnedillo Sánchez, Stefan Weber, and Brendan Tangney. Using short message service to encourage interactivity in the classroom. *Journal of Computers & Education*, 46(3):280–293, April 2006.
- [300] Carina Markett, Inmaculada Arnedillo Sánchez, Stefan Weber, and Brendan Tangney. Pls turn ur mobile on: Short message service (sms) supporting interactivity in the classroom. In *International Association for Development of the Information Society (IADIS) Conference on Cognition and Exploratory Learning in Digital Age*, December 2004.
- [301] Jose Alves Marques, Roland Balter, Vinny Cahill, Paulo Guedes, Neville Harris, Chris Horn, Sacha Krakowiak, Andre Kramer, John Slattery, and Gerard Vandome. Implementing the COMANDOS architecture. In *ES-PRIT '88: Putting the Technology to Use*, pages 1140–1157. Elsevier Science Publishers, November 1988. part 2.
- [302] Maurice T. Martin. TGS - A translator generator system. Master's thesis, Department of Computer Science, Trinity College Dublin, March 1992.
- [303] Paul McDonald, Dermot Geraghty, Ivor Humphreys, Stephen Farrell, and Vinny Cahill. Sensor network with delay tolerance (SeNDT). In *16th International Conference on Computer Communications and Networks (ICCCN'07)*, pages 1333–1338. IEEE, August 2007.

- [304] John McEvoy. E**: Porting the E database language to Amadeus. Master's thesis, Department of Computer Science, Trinity College Dublin, 1993.
- [305] Paula McGrath. Scrabble A distributed computation. Master's thesis, Department of Computer Science, Trinity College Dublin, 1988.
- [306] Paula McGrath and Brendan Tangney. Scrabble - A distributed application with an emphasis on continuity. *IEE/BCS Software Engineering Journal*, pages 160–164, May 1990.
- [307] Ciaran McHale. *Synchronisation in Concurrent, Object-oriented Languages: Expressive Power, Genericity and Inheritance*. PhD thesis, Department of Computer Science, Trinity College Dublin, Dublin 2, Ireland, October 1994.
- [308] Ciaran McHale, Seán Baker, Bridget Walsh, and Alexis Donnelly. Synchronisation variables. Technical Report TCD-CS-94-01, Department of Computer Science, Trinity College Dublin, Dublin 2, Ireland, January 1994.
- [309] Ciaran McHale, Bridget Walsh, Seán Baker, and Alexis Donnelly. Scheduling predicates. In M. Tokoro, O. Nierstrasz, and P. Wegner, editors, *Proceedings of the ECOOP '91 Workshop on Object-Based Concurrent Computing*, volume 612 of *Lecture Notes in Computer Science*, pages 177–193. Springer-Verlag, July 1991.
- [310] Ciaran McHale, Bridget Walsh, Seán Baker, and Alexis Donnelly. Evaluating synchronisation mechanisms: The inheritance matrix. Technical Report TCD-CS-92-18, Department of Computer Science, Trinity College Dublin, July 1992.
- [311] Colm McHugh. Supporting distributed programming in Eiffel. Master's thesis, Department of Computer Science, Trinity College Dublin, September 1994.
- [312] Colm McHugh and Vinny Cahill. Interfacing a language to the Comandos virtual machine. In Vinny Cahill, Roland Balter, Xavier Rousset de Pina, and Neville Harris, editors, *The COMANDOS Distributed Application Platform*, pages 209–233, Berlin, December 1993. Springer-Verlag.
- [313] Colm McHugh and Vinny Cahill. Eiffel**: An implementation of Eiffel on Amadeus, a Persistent, Distributed Applications Support Environment. In Boris Magnusson, Bertrand Meyer, and Jean-Francois Perot, editors, *10th International Conference on Technology of Object-Oriented Languages (TOOLS)*, pages 47–62. Prentice Hall, March–April 1993.
- [314] René Meier. Communication paradigms for mobile computing. *SIGMOBILE Mobile Computing and Communications Review*, 6(4):56–58, October 2002.

- [315] René Meier and Vinny Cahill. Exploiting proximity in event-based middleware for collaborative mobile applications. In Jean-Bernard Stefani, Isabelle M. Demeure, and Daniel Hagimont, editors, *Proceedings of the 4th IFIP International Conference on Distributed Applications and Interoperable Systems (DAIS'03)*, volume 2893 of *Lecture Notes in Computer Science*, pages 285–296. Springer-Verlag, November 2003.
- [316] René Meier and Vinny Cahill. Taxonomy of distributed event-based programming systems. *The Computer Journal*, 48(5):602–626, June 2005.
- [317] René Meier and Vinny Cahill. Location-aware event-based middleware: A paradigm for collaborative mobile applications? In *8th CaberNet Radicals Workshop*, October 2003.
- [318] René Meier and Vinny Cahill. STEAM: Event-based middleware for wireless ad hoc networks. In *International Workshop on Distributed Event-Based Systems (DEBS'02)*, pages 639–644. IEEE, July 2002.
- [319] René Meier and Vinny Cahill. Taxonomy of distributed event-based programming systems. In *International Workshop on Distributed Event-Based Systems (DEBS'02)*, pages 585–588. IEEE, July 2002.
- [320] René Meier, Vinny Cahill, Andronikos Nedos, and Siobhán Clarke. Proximity-based service discovery in mobile ad hoc networks. In Lea Kutvonen and Nancy Alonistioti, editors, *Distributed Applications and Interoperable Systems: 5th IFIP WG 6.1 International Conference, DAIS 2005*, volume 3543 of *Lecture Notes in Computer Science*, pages 115–129. Springer-Verlag, June 2005.
- [321] René Meier, Anthony Harrington, Kai Beckmann, and Vinny Cahill. A framework for incremental construction of real global smart space applications. *Pervasive and Mobile Computing*, 5(4):350–368, August 2009.
- [322] René Meier, Anthony Harrington, and Vinny Cahill. Towards delivering context-aware transportation user services. In *IEEE Conference on Intelligent Transportation Systems (IEEE ITSC 2006)*, pages 369–376. IEEE Computer Society, September 2006.
- [323] René Meier, Anthony Harrington, and Vinny Cahill. A distributed framework for intelligent transportation systems. In *12th World Congress on Intelligent Transport Systems (ITSWC2005)*. IEEE Computer Society, November 2005.
- [324] René Meier, Anthony Harrington, and Vinny Cahill. A framework for integrating existing and novel intelligent transportation systems. In *8th International IEEE Conference on Intelligent Transportation Systems (IEEE ITSC'05)*, pages 650–655. IEEE Computer Society, September 2005.

- [325] René Meier, Anthony Harrington, Thomas Termin, and Vinny Cahill. A spatial programming model for real global smart space applications. In Frank Eliassen and Alberto Montresor, editors, *Proceedings of the 6th IFIP International Conference on Distributed Applications and Interoperable Systems (DAIS 06)*, volume 4025 of *Lecture Notes in Computer Science*, pages 16–31. Springer-Verlag, June 2006. a previous version was published as technical report.
- [326] René Meier, Barbara Hughes, Raymond Cunningham, and Vinny Cahill. Towards real-time middleware for applications of vehicular ad hoc networks. In Lea Kutvonen and Nancy Alonistioti, editors, *Distributed Applications and Interoperable Systems: 5th IFIP WG 6.1 International Conference, DAIS 2005*, volume 3543 of *Lecture Notes in Computer Science*, pages 1–13. Springer-Verlag, June 2005.
- [327] René Meier, Joerg Kaiser, Barbara Hughes, Cristiano Brudna, and Vinny Cahill. An event model for real-time systems in mobile environments. In *2nd IEEE Workshop on Software Technologies for Embedded and Ubiquitous Computing Systems (WSTFEUS 2004)*, pages 29–34. IEEE Computer Society, May 2004.
- [328] René Meier, Marc-Olivier Killijian, Raymond Cunningham, and Vinny Cahill. Towards proximity group communication. In *Workshop on Middleware for Mobile Computing (Middleware 2001)*, November 2001.
- [329] René Meier and Deirdre Lee. Context-aware services for ambient environments. *The IGI International Journal of Ambient Computing and Intelligence (IJACI)*, 1(1):1–14, 2009.
- [330] René Meier and Paddy Nixon. Managing fault tolerance transparently using corba services. Technical Report TCD-CS-1999-05, Department of Computer Science, Trinity College Dublin, February 1999.
- [331] René Meier and Paddy Nixon. Managing fault tolerance transparently using corba services. In *Proceedings of the 5th ACM International Euro-Par Conference (Euro-Par’99)*, volume 1685 of *Lecture Notes in Computer Science*, pages 519–522. Springer-Verlag, September 1999.
- [332] René Meier and Sotirios Terzis. *Distributed Applications and Interoperable Systems*, volume 5053 of *Lecture Notes in Computer Science*. Springer-Verlag, June 2008. edited book.
- [333] Helmut Meitner, Manuel Medina, Eddie Finn, and Cornelia Persy. Security facilities in distributed systems. In H. Lippold and P. Schmitz, editors, *Sicherheit in netzgestuetzten Informationssystemen: SECUNET ’90*, pages 357–371, Cologne, Germany, May 1990. Vieweg, Braunschweig.
- [334] Michael Mock and Vinny Cahill. *Supporting a CAD Framework on an Advanced Distributed System*. GMD, Sankt Augustin, Germany, 1993. (GMD Arbeitspapier 793), 45 pages, not peer reviewed.

- [335] Michael Mock, Reinhold Kroeger, and Vinny Cahill. Implementing atomic objects with the Relax transaction facility. *Computing Systems*, 5(3):259–304, 1992.
- [336] Maria Moloney and Stefan Weber. A context-aware trust-based security system for ad hoc networks. In *SECOVAL workshop*, September 2005.
- [337] Tino Morenz and René Meier. An estimation-based automatic vehicle location system for public transport vehicles. In *11th International IEEE Conference on Intelligent Transportation Systems (IEEE ITSC 2008)*, pages 850–856. IEEE Computer Society Press, October 2008.
- [338] Jennifer Munnely and Siobhán Clarke. Infrastructure for ubiquitous computing: Improving quality with modularisation. In Eric Wohlstader, Daniel Lohmann, and Celina Gibbs, editors, *Proceedings of the 7th Workshop on Aspects, Components, and Patterns in Infrastructure Software (ACP4IS 2008) at AOSD 2008*, pages 1–7. ACM, March 2008.
- [339] J. Munnely and S. Clarke. H17 healthcare information management using aspect-oriented programming. In *Computer-Based Medical Systems, 2009. CBMS 2009. 22nd IEEE International Symposium on*, pages 1–4, 2009.
- [340] Jennifer Munnely and Siobhán Clarke. A domain-specific language for ubiquitous healthcare. In *Proceedings of the 3rd International Conference on Pervasive Computing and Applications, 2008 (ICPCA 2008)*, pages 757–762. IEEE, October 2008.
- [341] Jennifer Munnely and Siobhán Clarke. Alph: A domain-specific language for crosscutting pervasive healthcare concerns. In *DSAL '07: Proceedings of the 2nd workshop on Domain Specific Aspect Languages*, pages 1–4, New York, NY, USA, March 2007. ACM Press.
- [342] Jennifer Munnely, Serena Fritsch, and Siobhán Clarke. An Aspect-Oriented Approach to the Modularisation of Context. In *Fifth Annual IEEE International Conference on Pervasive Computing and Communications (Percom)*, pages 114–124. IEEE, March 2007. concise contribution.
- [343] Joanna Alicja Muras, Vinny Cahill, and Emma Katherine Stokes. A taxonomy of pervasive healthcare systems. In *1st International Conference on Pervasive Computing Technologies for Healthcare 2006*, pages 1–10. IEEE, November 2006.
- [344] Joanna A. Muras, Emma K. Stokes, and Vinny Cahill. Assistive technology in everyday living - a user survey of people with parkinson’s disease. *Technology and Disability*, 20(4):271–282, 2008.
- [345] Faris P. Naji. A back-end for an object-oriented distributed language. Master’s thesis, Department of Computer Science, Trinity College Dublin, Department of Computer Science, 1994.

- [346] Ciarán Bryc eand Nathan Dimmock, Karl Krudow, Jean-Marc Seigneur, Vinny Cahill, and Waleed Wagealla. Towards an evaluation methodology for computational trust systems. In Peter Herrmann, Valérie Issarny, and Simon Shiu, editors, *Third International Conference on Trust Management*, volume 3477 of *Lecture Notes in Computer Science*, pages 289–304. Springer-Verlag, May 2005.
- [347] Andronikos Nedos, Alex O’Connor, Siobhán Clarke Graham Abell, and Vinny Cahill. LATTE: Location and time triggered email. In *International Conference on Pervasive Computing and Communications, PCC-04*, pages 813–819. CSREA Press, June 2004.
- [348] Andronikos Nedos, Kulpreet Singh, and Siobhán Clarke. Mobile ad hoc services: Semantic service discovery in mobile ad hoc networks. In Asit Dan and Winfried Lamersdorf, editors, *Proceedings of the 4th International Conference on Service-Oriented Computing (ICSOC)*, volume 4294 of *Lecture Notes in Computer Science*, pages 90–103. Springer, December 2006.
- [349] Andronikos Nedos, Kulpreet Singh, and Siobhán Clarke. Service*: Distributed service advertisement for multi-service, multi-hop manet environments. In *7th IFIP International Conference on Mobile and Wireless Communication Networks (MWCN’05)*, September 2005.
- [350] Andronikos Nedos, Kulpreet Singh, Raymond Cunningham, and Siobhán Clarke. A gossip protocol to support service discovery with heterogeneous ontologies in manets. In *Third IEEE International Conference on Wireless and Mobile Computing, Networking and Communications (WiMob 2007)*, pages 53–53. IEEE, October 2007.
- [351] Andronikos Nedos, Kulpreet Singh, Raymond Cunningham, , and SiobhánClarke. Probabilistic discovery of semantically diverse content in MANETs. *IEEE Transactions on Mobile Computing*, 2008.
- [352] Colin Newman. Load balancing a practical implementation and measurement. Master’s thesis, Department of Computer Science, Trinity College Dublin, 1989.
- [353] Valentina Nisi. *Location Aware Multimedia Narratives*. PhD thesis, Dept. of Computer Science, Trinity College Dublin, July 2007.
- [354] Paddy Nixon and Vinny Cahill. Mobile computing: Technologies for a disconnected society. *IEEE Internet Computing*, 2(1):19–21, January/February 1998. Themed Issue, not peer reviewed.
- [355] Paddy Nixon, Vinny Cahill, and Fethi Rabhi. Building parallel and distributed systems. *Computer Journal*, 40(8):463–464, 1997. Guest Editors, Special Issue, not peer reviewed.

- [356] Paddy Nixon, Vinny Cahill, and Fethi Rabhi. Software engineering for distributed systems. In *Proceedings of the Software Engineering for Distributed Systems Mini-track of HICSS-30*, pages 287–289. IEEE, January 1997. not peer reviewed.
- [357] Paddy Nixon, Vinny Wade, Simon Dobson, John Fuller, and Sotirios Terzis. Designing components for a virtual organisation: a case study. In *Proceedings of Objects, Components and the Virtual Enterprise*, 1998.
- [358] Paddy Nixon, Vinny Wade, Sotirios Terzis, Marcus O’Connell, and Simon Dobson. The Virtues architecture: a software infrastructure for business-to-business e-commerce. In *2nd International Conference on Enterprise Information Systems*, February 2000.
- [359] Karl O’Connell. *System Support for Distributed Multi-User Virtual Worlds*. PhD thesis, Department of Computer Science, Trinity College Dublin, October 1997.
- [360] Karl O’Connell and Vinny Cahill. System support for scalable distributed virtual worlds. In *Proceedings of the ACM Symposium on Virtual Reality Software and Technology*, pages 141–142. ACM, July 1996.
- [361] Karl O’Connell, Vinny Cahill, Andrew Condon, Stephen McGerty, Gradimir Starovic, and Brendan Tangney. The VOID shell: A toolkit for the development of distributed video games and virtual worlds. In *Workshop on Simulation and Interaction in Virtual Environments*, pages 172–177. University of Iowa, July 1995.
- [362] Karl O’Connell, Tom Dinneen, Stephen Collins, Brendan Tangney, Neville Harris, and Vinny Cahill. Techniques for handling scale and distribution in virtual worlds. In *Proceedings of the 7th ACM SIGOPS European Workshop*, pages 17–24. ACM, September 1996.
- [363] Martin O’Connor. Process migration in the Chorus micro-kernel. Master’s thesis, Department of Computer Science, Trinity College Dublin, Department of Computer Science, 1994.
- [364] Martin O’Connor, Brendan Tangney, Vinny Cahill, and Neville Harris. Micro-kernel support for migration. *Distributed Systems Engineering Journal*, 1(4):212–223, June 1994.
- [365] Neil O’Connor, Raymond Cunningham, and Vinny Cahill. Self-adaptive context definition. In *First IEEE International Conference on Self-Adaptive and Self-Organizing Systems (SASO)*, pages 336–339. IEEE, July 2007.
- [366] Darragh O’Grady. An extensible, high-performance, distributed persistent store for Amadeus. Master’s thesis, Department of Computer Science, Trinity College Dublin, September 1994.

- [367] Annrai O’Toole. The implementation of a multi-processor kernel. Master’s thesis, Department of Computer Science, Trinity College Dublin, 1990.
- [368] Daniel Okouya, Loris Penserini, Sébastien Saudrais, Athanasios Staikopoulos, Virginia Dignum, and Siobhán Clarke. Designing mas organisation through an integrated mda/ontology approach. In Fernando Silva Parreiras, Jeff Z. Pan, Uwe Assmann, and Jakob Henriksson, editors, *Proceedings of the 1st International Workshop Transforming and Weaving Ontologies in Model Driven Engineering at Models 2008*, volume 395, pages 55–60, September 2008.
- [369] Joo Li Ooi. Access control for an object-oriented distributed platform. Master’s thesis, Department of Computer Science, Trinity College Dublin, August 1993.
- [370] Loris Penserini, Virginia Dignum, Athanasios Staikopoulos, Huib Aldewereld, and Frank Dignum. Balancing organizational regulation and agent autonomy: An mde-based approach. In *10th Annual International Workshop Engineering Societies in the Agents’ World (ESAW 2009)*, 2009.
- [371] Enrico Perla, Art O Cathain, Ricardo Simon Carbajo, Meriel Huggard, and Ciaran Mc Goldrick. Powertossim z: Realistic energy modelling for wireless sensor network environments. In Blanca Caminero, Francisco Delicado, and Richard Werner Nelem Pazzi, editors, *Third ACM Workshop on Performance Monitoring and Measurement of Heterogeneous Wireless and Wired Networks*, pages 35–42. ACM, 2008. DOI: 10.1145/1454630.1454636.
- [372] Razvan Popescu, Athanasios Staikopoulos, and Siobhan Clarke. An extensible monitoring and adaptation framework. In *2nd Workshop on Monitoring, Adaptation and Beyond (MONA+) at iCSOC/ServiceWave 09 Conference*, 2009.
- [373] Barry Redmond and Vinny Cahill. Supporting unanticipated dynamic adaptation of application behaviour. In Boris Magnusson, editor, *Proceedings of 16th European Conference on Object-Oriented Programming (ECOOP 2002)*, volume 2374 of *Lecture Notes in Computer Science*, pages 205–230. Springer-Verlag, June 2002.
- [374] Niels Reijers, Raymond Cunningham, René Meier, Barbara Hughes, Gregor Gaertner, and Vinny Cahill. Using group communication to support mobile augmented reality applications. In Luiz Bacellar, Peter Puschner, and Seongsoo Hong, editors, *5th IEEE International Symposium on Object-oriented Real-time Distributed Computing (ISORC 2002)*, pages 297–306. IEEE, April–May 2002.
- [375] Sean Reilly, Peter Barron, Vinny Cahill, Kieran Moran, and Mads Haahr. *A General-Purpose Taxonomy of Computer-Augmented Sports Systems*, chapter 2, pages 19–35. IGI Global, Hershey, PA, 2009. Digital Sport for

Performance Enhancement and Competitive Evolution: Intelligent Gaming Technologies.

- [376] Vinny Reynolds, Vinny Cahill, and Aline Senart. Requirements for an ubiquitous computing simulation and emulation environment. In *First International Conference on Integrated Internet Ad hoc and Sensor Networks (InterSense 2006)*. OCP Science, May 2006. invited paper.
- [377] Conor Ryan, René Meier, and Vinny Cahill. Federating heterogeneous event services. In *Third International Workshop on Distributed Event-Based Systems (DEBS'04)*, pages 86–91, May 2004.
- [378] Jan Sacha. *Exploiting Heterogeneity in Peer-to-Peer Systems Using Gradient Topologies*. PhD thesis, Dept. of Computer Science, Trinity College Dublin, July 2009.
- [379] Jan Sacha, Bartosz Biskupski, Dominik Dahlem, Raymond Cunningham, Jim Dowling, and René Meier. A service-oriented peer-to-peer architecture for a digital ecosystem. In Elizabeth Chang and Farookh Khadeer Hussain, editors, *Proceedings of the Inaugural IEEE International Conference on Digital Ecosystems and Technologies (DEST'07)*, pages 205–210. IEEE, February 2007.
- [380] Jan Sacha and Jim Dowling. A self-organising topology for master-slave replication in peer-to-peer environments. In *3rd International Workshop on Databases, Information Systems and Peer-to-Peer Computing*, pages 52–64, August 2005.
- [381] Jan Sacha, Jim Dowling, Raymond Cunningham, and René Meier. Discovery of stable peers in a self-organising peer-to-peer gradient topology. In Frank Eliassen and Alberto Montresor, editors, *Proceedings of the 6th IFIP International Conference on Distributed Applications and Interoperable Systems (DAIS'06)*, volume 4025 of *Lecture Notes in Computer Science*, pages 70–83. Springer-Verlag, June 2006.
- [382] Jan Sacha, Jim Dowling, Raymond Cunningham, and René Meier. Using aggregation for adaptive super-peer discovery on the gradient topology. In Alexander Keller and Jean-Philippe Martin-Flatin, editors, *The 2nd IEEE International Workshop on Self-Managed Networks, Systems & Services (SelfMan'06)*, volume 3996 of *Lecture Notes in Computer Science*, pages 77–90. Springer-Verlag, June 2006.
- [383] As'ad Salkham, Raymond Cunningham, Anurag Garg, and Vinny Cahill. A collaborative reinforcement learning approach to urban traffic control optimization. In *IEEE/WIC/ACM International Conference on Intelligent Agent Technology: IAT '08*, volume 2, pages 560–566. IEEE Computer Society, December 2008.

- [384] As'ad Salkham, Raymond Cunningham, Aline Senart, and Vinny Cahill. A taxonomy of collaborative context-aware systems. In *Proceedings of the Workshop on Ubiquitous Mobile Information and Collaboration Systems (UMICS)*, at *CAISE'06*, June 2006.
- [385] Sebastien Saudrais, Athanasios Staikopoulos, and Siobhan Clarke. Using specification models for runtime adaptations. In *International Workshop on Models Run Time on MODELS 09*, 2009.
- [386] Tilman Schäfer, Jean-Marc Seigneur, and Alexis Donnelly. Pearl: a generic architecture for live experiments in a remote laboratory. In *SCS International Conference on Simulation and Multimedia in Engineering Education, ICSEE'03*, January 2003.
- [387] Jean-Marc Seigneur. Fostering sustainability via trust engines. *IEEE Technology and Society Magazine*, 24(1):34–37, March 2005.
- [388] Jean-Marc Seigneur. Decentralized identity for the digital business ecosystem. *ERCIM News - Special: Security and Trust Management*, (63):22–23, October 2005.
- [389] Jean-Marc Seigneur. Interacting with trust in ambient intelligence. In *1st French-speaking conference on Mobility and ubiquity computing*, pages 139–142, New York, NY, USA, June 2004. ACM Press.
- [390] Jean-Marc Seigneur. Towards trustworthy eco computing. In *Sustainable Pervasive Computing Workshop of the Second International Conference on Pervasive Computing*, April 2004.
- [391] Jean-Marc Seigneur, Joerg Abendroth, and Christian Damsgaard Jensen. Bank accounting and ubiquitous brokering of trustos. In *7th CaberNet Radicals Workshop*, October 2002.
- [392] Jean-Marc Seigneur, Greg Biegel, and Christian Damsgaard Jensen. P2p with jxta-java pipes. In *2nd International Conference on the Principles and Practice of Programming in Java*, pages 207–212, New York, NY, USA, June 2003. Computer Science Press, Inc.
- [393] Jean-Marc Seigneur, Vinny Cahill, Christian Damsgaard Jensen, Elizabeth Gray, and Yong Chen. Secure framework architecture (beta). Technical Report TCD-CS-2004-07, Department of Computer Science, Trinity College Dublin, February 2004.
- [394] Jean-Marc Seigneur, Nathan Dimmock, Ciarán Bryce, and Christian Damsgaard Jensen. Combating spam with tea (trustworthy email addresses). In *2nd Conference on Privacy, Security and Trust*, pages 47–58, October 2004.

- [395] Jean-Marc Seigneur, Pierpaolo Dondio, Stephen Barrett, and Stefan Weber. Computational trust to further reduce the complexity of the higher education common space. In E. Tovar, editor, *International Conference on Engineering and Computer Education (ICECE 05)*, pages 112–120. IEEE, November 2005.
- [396] Jean-Marc Seigneur, Stephen Farrell, and Christian Damsgaard Jensen. Secure ubiquitous computing based on entity recognition. In *UBI-COMP2002 - Workshop on Security in Ubiquitous Computing*, September 2002.
- [397] Jean-Marc Seigneur, Stephen Farrell, Christian Damsgaard Jensen, Elizabeth Gray, and Yong Chen. End-to-end trust starts with recognition. In *First International Conference on Security in Pervasive Computing*, March 2003.
- [398] Jean-Marc Seigneur and Alan Gray. Default free introduction, rare self-introduction fee, costly spoofing: No profitable spam. In *EUROPRIX Scholars Conference*, November 2004.
- [399] Jean-Marc Seigneur, Alan Gray, and Christian Damsgaard Jensen. Trust transfer: Encouraging self-recommendations without sybil attack. In Peter Herrmann, Valérie Issarny, and Simon Shiu, editors, *Third International Conference on Trust Management*, volume 3477 of *Lecture Notes in Computer Science*, pages 321–337. Springer-Verlag, May 2005.
- [400] Jean-Marc Seigneur and Christian Damsgaard Jensen. Trading privacy for trust. In Theo Dimitrakos Christian Jensen, Stefan Poslad, editor, *2nd International Conference on Trust Management*, volume 2995 of *Lecture Notes in Computer Science*, pages 93–107. Springer-Verlag, March 2004.
- [401] Jean-Marc Seigneur and Christian Damsgaard Jensen. The role of identity in pervasive computational trust. In Philip Robinson, Harald Vogt, and Waleed Wagealla, editors, *Security and Privacy in Pervasive Computing Workshop (Second International Pervasive Conference)*. Kluwer, April 2004. The Kluwer International Series in Engineering and Computer Science , Vol. 780.
- [402] Jean-Marc Seigneur and Christian Damsgaard Jensen. The claim tool kit for ad-hoc recognition of peer entities. *Journal of Science of Computer Programming*, 52(1):49–71, January 2004.
- [403] Jean-Marc Seigneur and Christian Damsgaard Jensen. Trust enhanced ubiquitous payment without too much privacy loss. In *SAC '04: Proceedings of the 2004 ACM symposium on Applied computing*, pages 1593–1599, New York, NY, USA, March 2004. ACM Press.
- [404] Jean-Marc Seigneur and Christian Damsgaard Jensen. Privacy recovery with disposable email addresses. *IEEE Security&Privacy, special issue on Understanding Privacy*, 1(6):35–39, November/December 2003.

- [405] Jean-Marc Seigneur, Christian Damsgaard Jensen, Stephen Farrell, Elizabeth Gray, and Yong Chen. Towards security auto-configuration for smart appliances. In *Second International Smart Objects Conference*, May 2003.
- [406] Jean-Marc Seigneur, Anselm Lambert, Patroklos G. Argyroudis, and Christian D. Jensen. Pr3 email honeypot. Technical Report TCD-CS-2003-39, Department of Computer Science, Trinity College Dublin, September 2003.
- [407] Jean-Marc Seigneur, Daniel Solis, and Fergal Shevlin. Ambient intelligence through image retrieval. In *3rd International Conference on Image and Video Retrieval (CIVR)*, volume 3115 of *Lecture Notes in Computer Science*, pages 526–534. Springer-Verlag, July 2004.
- [408] Aline Senart, Melanie Bouroche, and Vinny Cahill. Modelling an emergency vehicle early-warning system using real-time feedback. *International Journal of Intelligent Information and Database Systems (IJIDS), Special Issue on Information Processing in Intelligent Vehicles and Road Applications*, 2(2):222–239, 2008.
- [409] Aline Senart, Mélanie Bouroche, Gregory Biegel, and Vinny Cahill. A component-based middleware architecture for sentient computing. In *ECOOOP 2004 Workshop on Component-Oriented Approaches to Context-Aware Systems*, June 2004. no proceedings.
- [410] Aline Senart, Mélanie Bouroche, Barbara Hughes, and Vinny Cahill. Coordination of safety-critical mobile real-time embedded systems. In *Workshop on Research Directions for Security and Networking in Critical Real-Time and Embedded Systems*, April 2006.
- [411] Aline Senart, Mélanie Bouroche, Neil O’Connor, Barbara Hughes, Kulpreet Singh, and Vinny Cahill. Supporting mobility using context-based reasoning. In *System Support for Ubiquitous Computing Workshop (UbiSys 2006)*, September 2006.
- [412] Aline Senart, Vinny Cahill, Anthony Harrington, Raymond Cunningham, Siobhán Clarke, and Marcin Karpinski. Towards self-organising global supply chains in the internet of things. In *1st International Workshop on System Support for the Internet of Things (WoSSIoT 2007), at EuroSys 2007*, Lisbon, Portugal, March 2007.
- [413] Aline Senart, Raymond Cunningham, Mélanie Bouroche, Neil O’Connor, Vinny Reynolds, and Vinny Cahill. MoCoA: Customisable middleware for context-aware mobile applications. In *8th International Symposium on Distributed Objects and Applications (DOA 2006)*, volume 4276 of *Lecture Notes in Computer Science*, pages 1722–1738. Springer Verlag, November 2006.

- [414] Aline Senart, Marcin Karpinski, Maciej Wieckowski, and Vinny Cahill. Using sensor networks for pedestrian detection. In *Fifth IEEE Consumer Communications and Networking Conference (CCNC'2008)*, pages 1–5. IEEE, January 2008.
- [415] Mark Sheppard, Brian Caulfield, Seán Baker, Ann Barry, Janet Dillon, and Marysia Cahill. Eolas - the implementation of an office information server. EUUG, Buntingford, 1988.
- [416] Atul Singh. *Self-Organizing Topology Adaptation in Peer-to-Peer Networks*. PhD thesis, Dept. of Computer Science, Trinity College Dublin, June 2007.
- [417] Atul Singh and Mads Haahr. Creating an adaptive network of hubs using schelling's model. *Communications of the ACM (CACM)*, 49(3):69–73, March 2006.
- [418] Atul Singh and Mads Haahr. A peer-to-peer reference architecture. In *Proceedings of the First International Conference on COMMunication System softWARE and MiddlewaRE (COMSWARE)*, January 2006.
- [419] Atul Singh and Mads Haahr. Creating an adaptive network of hubs using schelling's model. In *Proceedings of the IFIP/IEEE International Workshop on Self-Managed Systems & Services (SelfMan2005)*, May 2005. best paper award.
- [420] Atul Singh and Mads Haahr. Topology adaptation in p2p networks using schelling's model. In *Proceedings of the First Workshop on Games and Emergent Behaviours in Distributed Computing Environments, colcated with PPSN-VIII*, September 2004.
- [421] Kulpreet Singh, Siobhán Clarke, Andronikos Nedos, and Vinny Cahill. Proximity groups for mobile Ad Hoc networks. In *Workshop on Pervasive Computing at OOPSLA 2002*, November 2002.
- [422] Kulpreet Singh, Andronikos Nedos, and Siobhán Clarke. Transman: A group communication system for manets. In S. Chaudhuri, S.R. Das, H.S. Paul, and S. Tirthapura, editors, *Proceedings of the 8th International Conference on Distributed Computing and Networking (ICDCN)*, volume 4308 of *Lecture Notes in Computer Science*, pages 430–441. Springer, December 2006.
- [423] Kulpreet Singh, Andronikos Nedos, and Siobhán Clarke. TransMAN: A group communication system for MANETs. In *4th International Conference on Mobile Systems, Applications, and Services (MobiSys 2006)*, June 2006. poster session.
- [424] Kulpreet Singh, Andronikos Nedos, Gregor Gaertner, and Siobhán Clarke. Message stability and reliable broadcasts in mobile ad-hoc networks. In

Violet R. Syrotiuk and Edgar Chávez, editors, *International Conference on Adhoc Networks and Wireless (Adhoc Now 2005)*, volume 3738 of *Lecture Notes in Computer Science*, pages 297–310. Springer-Verlag, October 2005.

- [425] John Murphy Siobhán Clarke. Verifying components under development at the design stage: A tool to support the composition of component design models. In *ICSE '98 Workshop on Component-Based Software Engineering*, April 1998.
- [426] Frank Siqueira and Vinny Cahill. An open QoS architecture for CORBA applications. In *Proceedings of the 3rd International Symposium on Object-Oriented Real-time Distributed Computing (ISORC 2000)*, pages 328–335. IEEE Computer Society, March 2000.
- [427] Frank Siqueira and Vinny Cahill. Quartz: A QoS architecture for open systems. In *Proceedings of the 20th International Conference on Distributed Computing Systems (ICDCS 2000)*, pages 197–204. IEEE Computer Society, April 2000.
- [428] Frank Siqueira and Vinny Cahill. Quartz: A QoS architecture for open systems. In *Proceedings of the 18^o Simpósio Brasileiro de Redes de Computadores (SBRC 2000)*, pages 553–568, May 2000.
- [429] Frank Siqueira and Vinny Cahill. Delivering QoS in open distributed systems. In *Proceedings of the 7th IEEE Workshop on Future Trends of Distributed Computing Systems (FTDCS '99)*, pages 185–190. IEEE Computer Society, December 1999.
- [430] Frank Siqueira and Vinny Cahill. Quartz: Supporting QoS-constrained services in heterogeneous environments. In *19th IEEE Real-Time Systems Symposium: Work in Progress*. IEEE, December 1998.
- [431] John A. Slattery. The design and implementation of a communication subsystem for a distributed operating system. Master's thesis, Department of Computer Science, Trinity College Dublin, June 1990.
- [432] Mike Spence, Cormac Driver, and Siobhán Clarke. Collaborative context in mobile, context-aware trails-based applications. In *3rd Uk-UbiNet Workshop on Designing, Evaluating and using Ubiquitous Computing Systems*, February 2005.
- [433] Mike Spence, Cormac Driver, and Siobhán Clarke. Sharing context history in mobile, context-aware trails-based applications. In *1st international workshop on exploiting context histories in smart environments (ECHISE 2005), Pervasive 2005*, May 2005.
- [434] Gradimir Starovic. The design and implementation of an object-oriented input/output and storage system for a distributed kernel. Master's thesis, Department of Computer Science, Trinity College Dublin, September 1989.

- [435] Gradimir Starovic, Vinny Cahill, and Brendan Tangney. The ECO model: Events + constraints + objects. Technical Report TCD-CS-95-05, Department of Computer Science, Trinity College Dublin, Dublin 2, Ireland, May 1995.
- [436] Gradimir Starovic, Vinny Cahill, and Brendan Tangney. An event based object model for distributed programming. In *International Conference on Object Oriented Information Systems (OOIS'95)*, pages 72–86. Springer-Verlag, December 1995.
- [437] Pablo Sánchez, Lidia Fuentes, Andrew Jackson, and Siobhán Clarke. Aspects at the right time. *T. Aspect-Oriented Software Development*, 4:54–113, 2007. to appear.
- [438] Brendan Tangney. Teaching computers & society to disinterested cs students. Technical report, Department of Computer Science, Trinity College Dublin, December 1998.
- [439] Brendan Tangney, Vinny Cahill, Chris Horn, Dominic Herity, Alan Judge, Gradimir Starovic, and Mark Sheppard. Some ideas on support for fault tolerance in COMANDOS, an object oriented distributed system. *ACM SIGOPS Operating Systems Review*, 25(2):130–135, April 1991. Also presented at 1990 SIGOPS European Workshop in Bologna.
- [440] Brendan Tangney and Andrew Condon. Some issues in load balancing in Amadeus. In *Proceedings of the ECOOP '92 Workshop on Load Balancing in Object Oriented Systems.*, 1992.
- [441] Brendan Tangney, Andrew Condon, Vinny Cahill, and Neville Harris. Requirements for parallel programming in object-oriented distributed systems. *The Computer Journal*, 37(6):499–508, August 1994.
- [442] Brendan Tangney, Stephen Crane, Fergus Lynch, Annrai O'Toole, and Neville R. Harris. Primitives for coarse-grained parallelism in an object-oriented language. In *BISL CONPAR Conference*, pages 314–321, British Computer Society, England, September 1988.
- [443] Brendan Tangney, Stephan Crane, and John Moreau. Enforcing determinism in a CSMA/CD local area network. *Microprocessing and Microprogramming*, 26(3):2205–212, October 1989.
- [444] Brendan Tangney, Neville Harris, Chris Horn, Seán Baker, P. Duggan, and D. Lyons. Co-ordinated decentralised computer systems. In *Medical Informatics Europe 82*, pages 777–783. Springer-Verlag, 1982.
- [445] Brendan Tangney and Donal O'Mahony. *Japanese translation of Local Area Networks And Their Applications*. Kaibundo Publishing Co., Tokyo, 1991.

- [446] Brendan Tangney and Donal O'Mahony. *Local Area Networks And Their Applications*. Prentice-Hall (UK), Hemel Hempstead, 1988.
- [447] Brendan Tangney and Annrai O'Toole. An overview of load balancing in Amadeus. In R. A. Ammar, editor, *Proceedings of the 4th ISMM/IASTED Conference on Parallel and Distributed Computing and Systems*, pages 144–146, Washington DC, USA, October 1991. Acta Press, Anaheim.
- [448] Brendan Tangney, Elizabeth Oldham, Claire Conneely, Stephen Barrett, and John Lawlor. Pedagogy and processes for a computer engineering outreach workshop - the b2c model. In *IEEE Transactions on Education*, 2009. to appear.
- [449] Éric Tanter, Kris Gybels, Marcus Denker, and Alexandre Bergel. Context-aware aspects. In *Proceedings of the 5th International Symposium on Software Composition (SC 2006), at ETAPS 2006*, March 2006.
- [450] Paul Taylor. Aontas: The CaberNet technical abstracts service. Technical Report TCD-CS-95-22, Department of Computer Science, Trinity College Dublin, October 1995.
- [451] Paul Taylor. Transactions for Amadeus. Master's thesis, Department of Computer Science, Trinity College Dublin, Department of Computer Science, August 1993.
- [452] Paul Taylor, Vinny Cahill, and Michael Mock. Combining object-oriented systems and open transaction processing. *The Computer Journal*, 37(6):487–498, August 1994.
- [453] TCD Moonlight Team. Moonlight: VOID shell specification. Project Deliverable TCD-CS-95-14, Department of Computer Science, Trinity College Dublin, Dublin 2, Ireland, March 1995. Moonlight Del-1.5.1.
- [454] Sotirios Terzis, Paddy Nixon, Vinny Wade, Simon Dobson, and John Fuller. The future of enterprise groupware applications. In Joaquim Filipe and Jose Cordeiro, editors, *Proceedings of the 1st International Conference on Enterprise Information Systems*, pages 525–532, March 1999. Winner of Best Student Paper award.
- [455] Shiu Lun Tsang and Siobhán Clarke. Mining user models for effective adaptation of context-aware applications. *International Journal of Security and Its Applications (IJSIA)*, 2(1):53–62, January 2008.
- [456] Shiu Lun Tsang and Siobhán Clarke. Mining user models for effective adaptation of context-aware applications. In *The 2007 International Conference on Intelligent Pervasive Computing (IPC-07)*, pages 178–187. IEEE Computer Society, October 2007.

- [457] Shiu Lun Tsang, Siobhán Clarke, and Elisa L. A. Baniassad. An evaluation of aspect-oriented programming for java-based real-time systems development. In *IEEE International Symposium on Object-oriented Real-time distributed Computing (ISORC)*, pages 291–300, May 2004.
- [458] Connor Upton and Gavin Doherty. Designing usable decision support systems for hvm. In Lucia Lo Bello and Thilo Sauter, editors, *10th IEEE International Conference on Emerging Technologies in Factory Automation (EFTA)*, pages 459–466, Piscataway, New Jersey, September 2005. IEEE Computer Society.
- [459] Connor Upton and Gavin Doherty. Visual representation of complex information structures in high volume manufacturing. In Pedro Campos, Torkil Clemmensen, Rikke Orngreen, William Wong, and Annelise Mark Pejtersen, editors, *IFIP Conference on Human Work Interaction Design (HWID)*, pages 45–63, Berlin, February 2006. Springer.
- [460] Connor Upton and Gavin Doherty. Adapting the ads for high volume manufacturing. In Maria Francesca Costabile and Fabio Paternó, editors, *10th IFIP International Conference on Human Computer Interaction (Interact)*, pages 1038–1041. Springer, September 2005.
- [461] Connor Upton and Gavin Doherty. Designing usable charts for complex work settings. In *10th International Conference Information Visualisation (IV 06)*, pages 447–452. IEEE Computer Society, July 2006.
- [462] Paulo Verissimo, Vinny Cahill, Antonio Casimiro, Keith Cheverst, Adrian Friday, and Joerg Kaiser. CORTEX : Towards supporting autonomous and cooperating sentient entities. In *Proceedings of European Wireless 2002*, pages 595–601, February 2002. Invited paper, not peer reviewed.
- [463] John Vollbrecht, Pat Calhoun, Stephen Farrell, Leon Gommans, George Gross, Betty de Bruijn, Cees de Laat, Matt Holdrege, and David Spence. Aaa authorization framework. Request for Comments (RFC) 2904, Internet Engineering Task Force, August 2000.
- [464] John Vollbrecht, Pat Calhoun, Stephen Farrell, Leon Gommans, George Gross, Betty de Bruijn, Cees de Laat, Matt Holdrege, and David Spence. Aaa authorization application examples. Request for Comments (RFC) 2905, Internet Engineering Task Force, August 2000.
- [465] S.T. Vuong, O. Lau, Y.Q. Yu, H. Shi, and M. Haahr. Issues in internet-working wireless data networks for mobile computing. In *IEEE PACRIM '95 Conference on Computers, Communication, Visualization and Signal Processing*, pages 15–19, May 1995.
- [466] John T. Waldron. A XINU distributed system. Master’s thesis, Department of Computer Science, Trinity College Dublin, Department of Computer Science, Trinity College, Dublin, 1989.

- [467] Tom Wall and Vinny Cahill. Mobile RMI: Supporting remote access to Java server objects on mobile hosts. In Gordon Blair, Douglas Schmidt, and Zahir Tari, editors, *Proceedings of the 3rd International Symposium on Distributed Objects and Applications 2001 (DOA'01)*, pages 41–51. IEEE Computer Society, September 2001.
- [468] Bridget Walsh. The type model of Oscar-2. Master's thesis, Department of Computer Science, Trinity College Dublin, October 1992.
- [469] Bridget Walsh, Paul Taylor, Colm McHugh, Michel Riveill, Vinny Cahill, and Roland Balter. The Comandos supported programming languages. In Vinny Cahill, Roland Balter, Xavier Rousset de Pina, and Neville Harris, editors, *The COMANDOS Distributed Application Platform*, pages 44–71. Springer-Verlag, 1993.
- [470] Tim Walsh, Paddy Nixon, and Simon Dobson. An integrated system for managing intelligent buildings. In *Managing interactions in smart environments*. Springer-Verlag, 2000.
- [471] Tim Walsh, Paddy Nixon, and Simon Dobson. A review of mobility systems. Technical Report TCD-CS-2000-13, Department of Computer Science, Trinity College Dublin, March 2000.
- [472] Tim Walsh, Paddy Nixon, and Simon Dobson. As strong as possible mobility: an architecture for stateful object migration on the Internet. Technical Report TCD-CS-2000-11, Department of Computer Science, Trinity College Dublin, February 2000.
- [473] Tim Walsh, Paddy Nixon, and Simon Dobson. A managed architecture for mobile distributed applications. Technical Report TCD-CS-1999-03, Department of Computer Science, Trinity College Dublin, February 1999.
- [474] Yong Wang, Vinny Cahill, Elizabeth Gray, Colin Harris, and Lejian Liao. Bayesian network based trust management. In *Autonomic and Trusted Computing*, volume 4158 of *Lecture Notes in Computer Science*, pages 246–257. Springer-Verlag, September 2006.
- [475] Stefan Weber. *A Flexible Framework for Distributed Shared Objects*. PhD thesis, Department of Computer Science, Trinity College Dublin, October 2001.
- [476] Stefan Weber, Vinny Cahill, Siobhán Clarke, and Mads Haahr. Wireless ad hoc network for Dublin: A large-scale ad hoc network test-bed. *ERCIM News*, 54:34–35, July 2003.
- [477] Stefan Weber and Paddy Nixon. An object oriented dsm framework. In *Proceedings of Frontiers'96*. IEEE, October 1996.

- [478] Stefan Weber, Paddy Nixon, and Brendan Tangney. A framework for distributed shared memory. *Concurrency Practice and Experience*, 14(1):33–55, May 2002.
- [479] Stefan Weber, Paddy Nixon, and Brendan Tangney. A flexible framework for consistency management in object oriented distributed shared memory. Technical report, Department of Computer Science, Trinity College Dublin, October 1998.
- [480] Iseult White. The development of subtyping in Comandos. Master’s thesis, Department of Computer Science, Trinity College Dublin, November 1989.
- [481] Maomao Wu, Adrian Friday, Gordon Blair, Thirunavukkarasu Sivaharan, Paul Okanda, Hector Duran Limon, Carl-Fredrik Sjörensén, Gregory Biegel, and René Meier. Novel component middleware for building dependable sentient computing applications. In *ACM Workshop on Component-Oriented Approaches to Context-Aware Computing (ECOO’04)*, June 2004.
- [482] Chris Zimmermann and Vinny Cahill. It’s your choice - on the design and implementation of a flexible metalevel architecture. In *ICCDs ’96: Proceedings of the 3rd International Conference on Configurable Distributed Systems*. IEEE Computer Society, May 1996.
- [483] Chris Zimmermann and Vinny Cahill. Open to suggestions: On adaptable, distributed application support architectures. In *European Research Seminar on Advances in Distributed Systems (ERSADS ’95)*, pages 164–170, Grenoble, April 1995. INRIA/IMAG.
- [484] Chris Zimmermann and Vinny Cahill. Roo: A framework for real-time threads. In *Proceedings of the 3rd Workshop on Parallel and Distributed Real-Time Systems*, pages 137–146. IEEE Computer Society Press, April 1995.
- [485] Chris Zimmermann and Vinny Cahill. Raising the cub - distributed real-time support in Tigger. In *Proceedings of the German UNIX User Group Conference*, pages 79–86. German UNIX User Group, September 1994.
- [486] Vinny Cahill, Roland Balter, Xavier Rousset de Pina, and Neville Harris, editors. *The COMANDOS Distributed Application Platform*. ESPRIT Research Reports Series. Springer-Verlag, 1993.
- [487] Paddy Nixon, Gerard Lacey, and Simon Dobson, editors. *Managing interactions in smart environments*. Springer-Verlag, 2000.
- [488] Thomas Strang, Vinny Cahill, and Aaron Quigley, editors. *Pervasive 2006 Workshop Proceedings*, May 2006.
- [489] Securely available credentials protocol. Request for Comments (RFC) 3767, Internet Engineering Task Force, June 2004.

- [490] As'ad Salkham and Vinny Cahill. Soilse: A decentralized approach to optimization of fluctuating urban traffic using reinforcement learning. In *Proceedings of the 13th International IEEE Conference on Intelligent Transportation Systems (ITSC 2010)*, pages 531–538, September 2010.
- [491] Barbara Hughes and Vinny Cahill. Exploiting space/time trade-offs in real-time mobile ad hoc networks. *International Journal of Mobile Network Design and Innovation*, 3(1):21–32, 2009.
- [492] René Meier and Vinny Cahill. On event-based middleware for location-aware mobile applications. *IEEE Transactions on Software Engineering*, 36(3):409–430, May/June 2010.
- [493] Dan Marinescu, Mélanie Bouroche, and Vinny Cahill. Towards an active approach to guaranteed arrival times based on traffic shaping. In Gereon Meyer and Jürgen Valldorf, editors, *Advanced Microsystems for Automotive Applications 2010: Smart Systems for Green Cars and Safe Mobility*, pages 367–376. Springer, May 2010.
- [494] Dan Marinescu, Jan Curn, Marco Slot, Mélanie Bouroche, and Vinny Cahill. An active approach to guaranteed arrival times based on traffic shaping. In *Proceedings of the 13th International IEEE Conference on Intelligent Transportation Systems (ITSC 2010)*, pages 1711 – 1717, September 2010.
- [495] Jan Curn, Dan Marinescu, and Vinny Cahill. A flexible approach to management and processing of collaborative vehicular perception data. In *Proceedings of the Workshop on Emergent Cooperative Technologies in Intelligent Transportation Systems at the 2010 IEEE Intelligent Transportation Systems Conference 2010*, September 2010.
- [496] Alexandre Bergel, William Harrison, Vinny Cahill, and Siobhán Clarke. Flowtalk: Language support for long-latency operations in embedded devices. *IEEE Transactions on Software Engineering*. Accepted.
- [497] Cormac Driver, Éamonn Linehan, Sean Reilly, Vinny Cahill, and Siobhán Clarke. Managing embedded systems complexity with aspect-oriented model-driven engineering. *ACM Transactions on Embedded Computing Systems*, 10(2):21:1–21:26, January 2011.
- [498] Marco Slot, Mélanie Bouroche, and Vinny Cahill. Membership service specifications for safety-critical geocast in vehicular networks. In Zabih Ghassemlooy and Wai Pang Ng, editors, *Proceedings of the Seventh IEEE, IET International Symposium on Communication Systems, Networks and Digital Signal Processing (CSNDSP)*, pages 470–475. CSNDSP, July 2010.
- [499] Gregory Biegel and Vinny Cahill. Requirements for middleware for pervasive information systems. In Panos E. Kourouthanassis and George M. Giaglis, editors, *Pervasive Information Systems*, Advances in Management

Information Systems, chapter 3, pages 86–102. M. E. Sharpe, New York, USA, 2007.

- [500] Ashley Sterritt and Vinny Cahill. Customisable model transformations based on non-functional requirements. In *2008 IEEE Congress on Services (SERVICES 2008) - Part I*, pages 329–336. IEEE Computer Society, July 2008. Presented at the International Workshop on Methodologies for Non-functional Properties in Services Computing (MNPSC).
- [501] Ashley Sterritt, Siobhán Clarke, and Vinny Cahill. Precise specification of design pattern structure and behaviour. In Thomas Kuhne, Bran Selic, Marie-Pierre Gervais, and François Terrier, editors, *Proceedings of the Sixth European Conference on Modelling Foundations and Applications (ECMFA 2010)*, volume 6138 of *Lecture Notes in Computer Science*, pages 277–292, Berlin/Heidelberg, June 2010. Springer.
- [502] Shane Brennan, Serena Fritsch, Yu Liu, Ashley Sterritt, Jorge Fox, Éamonn Linehan, Cormac Driver, René Meier, Vinny Cahill, William Harrison, and Siobhán Clarke. A framework for flexible and dependable service-oriented embedded systems. In Antonio Casimiro, Rogério de Lemos, and Cristina Gacek, editors, *Architecting Dependable Systems VII (ADS VII)*, volume 6420 of *Lecture Notes in Computer Science*, pages 123–145. Springer-Verlag, Berlin, Germany, November 2010.
- [503] Ivana Dusparic and Vinny Cahill. Multi-policy optimization in self-organizing systems. In Danny Weyns, Sam Malek, Rogério de Lemos, and Jesper Andersson, editors, *First International Workshop on Self-Organizing Architectures, SOAR 2009, Revised Selected and Invited Papers*, volume 6090 of *Lecture Notes in Computer Science*, pages 101–126. Springer-Verlag, Berlin, Germany, 2010.
- [504] Ivana Dusparic and Vinny Cahill. Distributed w-learning: Multi-policy optimization in self-organizing systems. In *Proceedings of the 3rd IEEE International Conference on Self-Adaptive and Self-Organizing Systems (SASO)*, pages 20–29. IEEE, September 2009.
- [505] Ivana Dusparic and Vinny Cahill. Using distributed w-learning for multi-policy optimization in decentralized autonomic systems (poster). In *ICAC '09: Proceedings of the 6th International Conference on Autonomic Computing and Communications*, pages 63–64. ACM, June 2009.
- [506] Ivana Dusparic and Vinny Cahill. Multi-policy optimization in decentralized autonomic systems (extended abstract). In Carles Sierra, Cristiano Castelfranchi, Keith S. Decker, and Jaime Simao Sichman, editors, *Proceedings of the 8th International Conference on Autonomous Agents and Multiagent Systems (AAMAS 2009)*, volume 2, pages 1203–1204. International Foundation for Autonomous Agents and Multiagent Systems, May 2009.

- [507] Ivana Dusparic and Vinny Cahill. Using reinforcement learning for multi-policy optimization in decentralized autonomous systems - an experimental evaluation. In Juan Gonzalez Nieto, Wolfgang Reif, Guojun Wang, and Jadwiga Indulska, editors, *The Sixth International Conference on Autonomous and Trusted Computing (ATC-09)*, pages 105–119. Springer, July 2009.
- [508] Gareth Bennett, Eoin A. King, Jan Curn, Vinny Cahill, Fabian Bustamante, and Henry J. Rice. Environmental noise mapping using measurements in transit. In *Proceedings of the 2010 International Conference on Noise and Vibration Engineering (ISMA 2010)*, September 2010.
- [509] As'ad Salkham. *Decentralized Optimization of Fluctuating Urban Traffic Using Reinforcement Learning*. PhD thesis, School of Computer Science and Statistics, Trinity College Dublin, June 2010.
- [510] Serena Fritsch and Siobhán Clarke. Timeadapt: timely execution of dynamic software reconfigurations. In *MDS '08: Proceedings of the 5th Middleware doctoral symposium*, pages 13–18, New York, NY, USA, 2008. ACM.
- [511] Athanasios Staikopoulos, Owen Cliffe, Razvan Popescu, Julian Padget, and Siobhán Clarke. Template-based adaptation of semantic web services with model-driven engineering. *IEEE Transactions on Services Computing*, 3:116–130, 2010.
- [512] Razvan Popescu, Athanasios Staikopoulos, Peng Liu, Antonio Brogi, and Siobhán Clarke. Taxonomy-driven adaptation of multi-layer applications using templates. In *Proceedings of the Fourth IEEE International Conference on Self-Adaptive and Self-Organizing Systems*, pages 213–222. IEEE, 2010.
- [513] Athanasios Staikopoulos, Sébastien Soudrais, Siobhán Clarke, Julian Padget, Owen Cliffe, and Marina De Vos. Mutual dynamic adaptation of models and service enactment in alive*. *Models@Runtime workshop, MODELS 2008*, page 10, 2008.
- [514] Shane Brennan, Vinny Cahill, and Siobhan Clarke. Applying non-constant volatility analysis methods to software timeliness. In *In Proceedings of the 12th Euromicro Conference on Real-Time Systems, Work-in-progress Session*, 2009.
- [515] Shane Brennan, Michael Hayes Brady, Catherine Giltrap, Micheal Mac an Airchinnigh, and Glenn Strong. What makes a great mobile digital art exhibition? In *ELPub2011 (to appear)*, June 2011.
- [516] Anthony Harrington and Vinny Cahill. Model-driven engineering of planning and optimisation algorithms for pervasive computing environments. In *IEEE International Conference on Pervasive Computing and Communication (PerCom)*, pages 172–180, March 2011.

- [517] Yu Liu and René Meier. Adaptstream: Towards achieving fluidity in adaptive stream-based systems. In *Proceedings of the 26th ACM Symposium on Applied Computing*, pages 216–222. ACM Press, 2011.
- [518] Mélanie Bouroche, Vinny Cahill, Ivana Dusparic, Anurag Garg, and Fabian Bustamante. Research challenges in participatory sensing for urban management applications. Technical report, School of Computer Science and Statistics, Trinity College Dublin, June 2011.
- [519] Christin Groba and Siobhán Clarke. Opportunistic composition of sequentially-connected services in mobile computing environments. In *International Conference on Web Services (ICWS)*, pages 17–24. IEEE, 2011. presented with Best Student Paper Award.
- [520] Shu Zhang and Vinny Cahill. Towards collision-free medium access control in vehicular ad-hoc networks. In *Proceedings of the eighth ACM international workshop on Vehicular InterNetworking*, pages 83–84, New York, NY, USA, 2011. ACM. poster.
- [521] R. Kapitza G. Söldner and R. Meier. Providing context-aware adaptations based on a semantic model. In *Proceedings of the 11th International IFIP Conference on Distributed Applications and Interoperable Systems (DAIS'11)*, pages 57–70. Springer-Verlag, June 2011.
- [522] Derek Fagan and René Meier. Intelligent time of arrival estimation. In *Integrated and Sustainable Transportation System (FISTS), 2011 IEEE Forum on*, pages 60–66. The Institute of Electrical and Electronics Engineers, Incorporated (IEEE), June 2011.
- [523] Guoxian Yang and Stefan Weber. Uisce: Characteristic-based routing in mobile ad hoc networks. In *Proceedings of the 10th IFIP Annual Mediterranean Ad Hoc Networking Workshop (Med-Hoc-Net)*, pages 119–122, June 2011.
- [524] Guoxian Yang and Stefan Weber. Adapting wardrop equilibrium to facilitate optimal routing in wireless ad hoc networks. In *Proceedings of the IEEE International Symposium on a World of Wireless, Mobile and Multimedia Networks (WoWMoM)*, pages 1–9, June 2011.
- [525] Colm Bhandal, Mélanie Bouroche, and Arthur Hughes. An abstract model of a coordination protocol using the uppaal model checker. In *Proceedings of the 9th IEEE/IFIP International Conference on Embedded and Ubiquitous Computing (EUC 2011)*. IEEE Computer Society, October 2011.
- [526] Marco Slot and Vinny Cahill. A reliable membership service for vehicular safety applications. In *Intelligent Vehicles Symposium (IV), 2011 IEEE*, pages 1163–1169. IEEE, June 2011.

- [527] Colm Bhandal, Mélanie Bouroche, and Arthur Hughes. A process algebraic description of a temporal wireless network protocol. In J. Bowen, S. Reeves, T. Margaria, J. Padberg, and G. Taentzer, editors, *Proceedings of 4th International Workshop on Formal Methods for Interactive Systems (FMIS 2011)*, volume 45, June 2011.