lero THE IRISH SOFTWARE ENGINEERING RESEARCH CENTRE

Newsletter June 2013

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All Ireland Scratch Competition

The next generation of software entrepreneurs took to the Scratch National Finals in IT Tallaght on Saturday 25th May. The 2013 Scratch competition was a great success with record numbers entering. The number of teams entered rose dramatically from 194 last year to 683 this year. A total of 1245 students registered for the 2013 competition. The largest growth was at primary level with 476 teams signing up. Thirty-three projects progressed to the national finals that were held in IT Tallaght on Saturday May 25th. All finalists presented their projects on the day and first, second and third prizes were awarded in the games and animation categories for junior and senior level. Having founded the Irish Scratch competition in 2010, Lero was delighted to hand over the running of the 4th Scratch competition to the Irish Computer Society. For detailed results and to view photos from the day see http://www.scratch.ie/competition.

Winners of the Senior Animation(L to R) Cliodhna Condon, Evie Kearney (2nd), Ammar Janjua (3rd), Meghann Kissane (1st)

Winners of the senior Games (L to R) Mirela Conica (3rd), Shane Fanning (1st), James O' Neill (2nd)

Director's Message

During the last few months we have had a significant Lero presence at many international events, in particular at ICSE. We have also organized several industry events, seen a number of successful PhD vivas, and Lero has also been part of the biggest Scratch competition so far. More details are contained in the newsletter.

For those of you taking a well-deserved break this summer, have a really great time and we look forward to seeing you refreshed and ready to work on lots of proposals in the near future..

Professor Mike Hinchey
Director

Well done to all teachers and students that were involved in the competition this year.
The winners were,
Games senior category was 'The Lostlands', Shane Fanning - St Conleths Community College
Games junior category was 'StickWorld', Sorcha Ni Bhradaigh - Gaelscoil an Ghoirt Álainn
Animation senior category was 'The Adventure of Jin',Meghann Kissane - Presentation Secondary School Listowel
Animation Category Junior 'Cinderella Story', Kerri Murphy, Sarah Cotter - Scoil Mhuire na nGrást

New Fellow for ICS

Congratulations to David Gregg (Lero@TCD) who recently became a Fellow of the Irish Computer Society. David received his fellowship at the annual Fellows' Lunch last Friday. All Lero members are members of ICS; those who feel they may be eligible are strongly encouraged to consider upgrading their membership to a higher grade.

Scratch Training

Summer Scratch training courses are being held in education centres around the country for primary schools. The course is titled "Using Scratch to Develop Numeracy. There will also be a one-day workshop "Introduction to Scratch 2.0" at the University of Limerick on Thursday July 4th for secondary school teachers with previous experience of Scratch 1.4.

Best Paper at IEEE

Ronan Doolan (DCU) won the IEEE Vehicular Technology Conference Best Paper Award on the Transportation, Vehicular Networks, Vehicular Electronics and Telematics Track for our paper on "VANET-enabled Eco-friendly Road Characteristics-aware Routing for Vehicular Traffic". The paper is available here: http://elm.eeng.dcu.ie/~munteang/papers/2013_VTC_RD.pdf

Jennifer Burke Award Nomination

Sinead Mellet's NetKnowing 2.0 Project was nominated for the Jennifer Burke Award for innovation in teaching and learning. This is an annual award from DCU and the Irish Learning Technology Association. NetKnowing 2.0 developed, tested and disseminated a didactical package that consists of:

- A Self-learning basic course focused on how to use Web 2.0, Social Networks and Net Collaborating Practices.
- An eLearning advanced course focusing on the implementation of Web 2.0 structured informal learning systems and strategies in SMEs and organizations.

NetKnowing 2.0 was a European consortium composed of six organisation partners:- Iturbrok S.L. (Spain), Tempo Training and Consulting (Czeck Republic), The Educational Media Research Centre,University of Limerick.(EMRC ,Ireland) and Institut Arbeit und Tech.

Down under for Prof Kevin Ryan

On Thursday 18th of April Professor Kevin T Ryan, former director of Lero, visited Swinburne University in Melbourne, Australia at the invitation of Professor John Grundy. Kevin gave talks to a final year undergraduate class and to a departmental group of researchers and faculty on RE research and on the origins and objectives of Lero.

Talking Chinese

Mel Ó Cinnéide delivered a research seminar at the Software School, Fudan University, Shanghai in April, entitled "Current Research Trends in Automated Refactoring."

National Digital Education Summit

Clare McInerney took part in a panel discussion titled "'Developing the digital curriculum – What should be considered when creating content?" at the National Digital Education Summit last Thursday April 25th in Croke Park.

PhD and Vivas

Congratulations to Michael Lane on a successful PhD viva last week. The external examiner was Prof Bjorn Lundell, internal examiner, Dr Patrick Buckley and Chair, Dr Gabriela Avram. Michael was supervised by Prof Brian Fitzgerald and Prof Par Agerfalk.

On 21st March Newres Al Haider successfully defended his thesis. He was supervised by Prof John Murphy at UCD.

Congratulations to Hesham Shokry who successfully defended his PhD viva on April 13th. His supervisor was Prof Mike Hinchey; external examiner was Prof Simon Dobson and internal examiner was Dr Jim Buckley. The committee was chaired by Dr Norah Power.

Oisin Cawley was another Lero student who had a successful Viva. His thesis was entitled 'The applicability of a Lean Software Development Methodology within the Regulated Domain of Medical Device Software'. His supervisors were Dr Ita Richardson and Dr Xiaofeng Wang.

Howell Jordan was the fourth successful Viva candidate. His thesis is 'Measuring the Structure of Agent-Oriented Software'. Howell was supervised by Dr Rem Collier (UCD) and Prof Mike Hinchey. His research was funded by the HEA PRTLI 4 grant through the Lero Graduate School of Software Engineering (LGSSE). He continues his research in Lero on a project funded by the European Space Agency (ESA).

Lero at ICSE 2013

Lero was invited to present nine papers at the the International Conference on Software Engineering, (ICSE 2013) in San Francisco from 18-26th May. ICSE is the premier worldwide forum for professionals involved in all aspects of software engineering research. Over 1,000 academic, industrial and governmental researchers from dozens of countries will attend. Lero researchers presented papers covering many aspects of software engineering including agile methods, medical devices and adaptive privacy. Well done to everyone whose paper was accepted. Those involved in the organisation of the conference and the papers are listed below.

Organising Committee
Software Engineering in Education Co-Chair: Ita Richardson, Lero@UL.

Workshop Co-organisers
Goetz Botterweck, Andreas Pleuss, both Lero@UL, the 4th International Workshop on Product LinE Approaches in Software Engineering (PLEASE 2013).
Mazeiar Salehie, Lero@UL, 2nd International Workshop on Software Engineering Challenges for the Smart Grid (SE4SG 2013).

PUBLICATIONS

Conference Papers

Buckley, J., Mooney, S., Rosik, J. and Ali, N. (2013) 'JITTAC: A Just-In-Time Tool for Architectural Consistency', in the International Conference on Software Engineering (ICSE 2013), San Francisco, USA.

Omoronyia, I., Cavallaro, L., Salehie, M., Pasquale, L. and Nuseibeh, B. (2013) 'Engineering Adaptive Privacy: on the role of privacy awareness requirements', in the International Conference on Software Engineering (ICSE 2013), San Francisco, USA.

Fitzgerald, B., Stol, K., O'Sullivan, R. and O'Brien, D. (2013) 'Scaling Agile Methods to Regulated Environments: An Industry Case Study', in the International Conference on Software Engineering (SEIP track), San Francisco, USA. pp 987-996.

Hashmi, S., Ishikawa, F. and Richardson, I. (2013) 'A Communication Process for Global Requirements Engineering', in the International Conference on Software and System Process (ICSSP), co-located with ICSE, San Francisco, USA.

Workshop Papers

Harman, M., Clark, J. and Ó Cinnéide, M. (2013) 'Dynamic Adaptive Search Based Software Engineering Needs Fast Approximate Metrics', in ICSE workshops, keynote paper at 4th International Workshop on Emerging Trends in Software Metrics (WETSoM), San Francisco, USA.

Marinescu, A., Harris, C., Dusparic, I., Clarke, S. and Cahill, V. (2013) 'Residential Electrical Demand Forecasting in Very Small Scale: An Evaluation of Forecasting Methods', in 2nd International Workshop on Software Engineering Challenges for the Smart Grid co-located at ICSE 2013 San Francisco, USA.

McHugh, M., Cawley, O., McCaffery, F., Richardson, I. and Wang, X. (2013) 'An Agile V-Model for Medical Device Software Development to overcome the challenges with Plan-Driven Software Development Lifecycles', in the 5th International Workshop on Software Engineering in Health Care co-located with ICSE 2013, San Francisco, USA.

Power, K. (2013) 'Understanding the Impact of Technical Debt on the Capacity and Velocity of Teams and Organizations: Viewing Team and Organization Capacity as a Portfolio of Real Options', in the Fourth International Workshop on Managing Technical Debt (MTD 2013), in conjunction with International Conference on Software Engineering (ICSE 2013), San Francisco, CA, USA.

Stol, K. and Fitzgerald, B. (2013) 'Uncovering Theories in Software Engineering', in 2nd Workshop on a General Theory of Software Engineering (GTSE) collocated with ICSE 2013, San Francisco, USA.

Keynotes

Second International Workshop on the Twin Peaks of Requirements and Architecture (collocated with ICSE): keynote by Bashar Nuseibeh (http://re.cs.depaul.edu/twinpeaks/pages/Invited.html)
Programme Committee Membership:
Student Contest on Software Engineering (SCORE 2013): Liliana Pasquale, Lero@UL and Ita Richardson, Lero@UL.
General Theory of Software Engineering (GTSE 2013): Howell Jordan, Lero@UCD.
Conference on Software Engineering Education and Training (co-located with ICSE): Rory O'Connor, Lero@DCU.
8th International Symposium on Software Engineering for Adaptive and Self-Managing Systems (SEAMS'13) collocated with ICSE: Bashar Nuseibeh, Liliana Pasquale and Mazeiar Salehie (all Lero@UL) as PC members (http://www.yorku.ca/mlitoiu/seams2013/program-committee/index.html)
5th International Software Engineering in Health Care (SEHC) workshop at ICSE: Martin McHugh, Lero@DKIT.
ICSE Software Engineering in Practice (SEIP), Fergal McCaffery, Lero@DKIT.
ICSE Software Engineering in Education, Fergal McCaffery, Lero@DKIT.

International Standards Organization

ISO/IEC JTC 1/ SC7 26th Plenary Meeting took place in May. Rory O'Connor (Lero@DCU), Paul Clarke and Marion Lepmets (DkIT) represented Ireland at ISO (International Standards organization) in Canada. The mission of ISO is 'Standardization of processes, supporting tools and supporting technologies for the engineering of software products and systems'. Rory primarily represented the software processes for very small companies (ISO/IEC 29110), while Paul and Marion were representing the medical spice project (ISO/IEC 15504).

Dr Rory O'Connor

Dr Paul Clarke

3rd Annual Lero - NII - OU Workshop

Lero rsearchers from UL and TCD attended the 3rd annual Lero-NII-OU Workshop, in Windsor, UK between 30th June and 2nd July 2013. The workshop's theme this year was "Adaptive Security and Privacy in a Smarter World". The keynote speaker was Dr. Emil Lupu from Imperial College London, with 17 presentations from various participants including Melanie Bouroche and Constatntonos Patsakis from Lero@TCD, and Luca Cavallaro, Liliana Pasquale and Mazeiar Salehie from Lero@UL. The workshop is one of the concrete manifestation of the Memornda of Understanding signed between the National Institite of Informatics (NII) and both Lero and the Open University. Previous editions were held at the OU (July 2012) and UL (2011)..

Connected Health Open Day

Dr Padraig O'Leary and Dr Ita Richardson

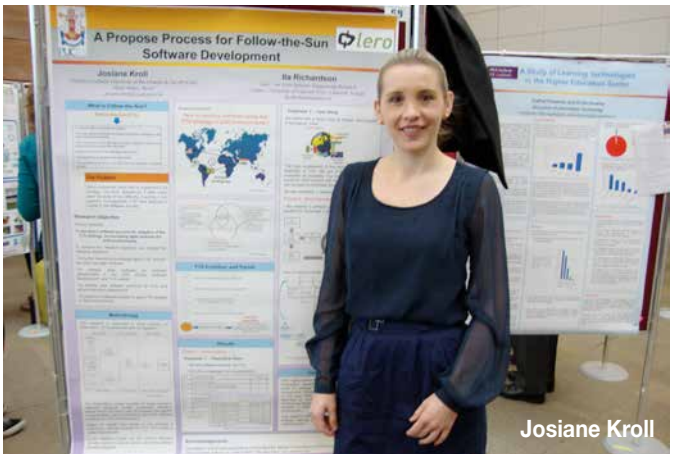
ARCH – the Applied Research in Connected Health centre hosted an Open Day on the 11th June at the Global Irish Institute, UCD. The Open Day provided Industry with the opportunity to hear and see what ARCH has to offer as a Connected Health Technology Centre. Lero – is leading the work package on "Informing Standards of Care", one of four ARCH work packages. Dr. Ita Richardson spoke at the open day and Dr. Pádraig O'Leary presented a poster.

Research Day in NUIG

On Thursday 11th April Lero students, Sajid Hashmi, Josiane Kroll, Miguel Monasor and Feng Chen presented posters at the NUIG/UL PhD Research Day".

(L to R) Feng Chen, Josiane Kroll, Miguel Monasor, Sajid Hashmi

Congratulations to Josiane who was awarded 2nd place in the poster competition. Dr. Sarah Beecham & Dr. John Noll also attended the event, with Sarah judging some of the PhD competition. Josiane recently gave a t talk in Lero at University of Limerick in June, on 'A Software Process for Follow-the-Sun(FTS)Development: Preliminary and Expected Results'. Josiane Kroll is a PhD student at University Catholic of Rio Grande do Sul (PUCRS), Porto Alegre, Brazil. She is also a research fellow of the agreement PUCRS/Dell Computers of Brazil Ltd. Her research includes Global Software Development (GSD), Empirical Software Engineering (ESE), software processes, agile methodologies, follow-the-sun (FTS) and around-the-clock development. Her research is funded by CAPES (Brazilian Ministry of Education) and Dell Computers of Brazil.



Josiane Kroll

Software Quality for Medical Devices and Healthcare.

(l to r) Dr Ita Richardson, Paul Frehill, Dr Paul Clarke, Brendan O'Malley)

Dr. Ita Richardson from Lero at the University of Limerick presented "Software Quality Assurance in Healthcare – A Success Story", at Enterprise Ireland on June 16th. In this presentation Ita described the different types of software systems used in healthcare and discussed a research project "Development of Hospital Quality Assurance program (H-QAP)" which has been implemented across a number of departments in hospitals in the Mid-West. Paul Frehill from SynchroPhi in Galway provided an industry perspective on software quality and described the work required to attain CE marking for their products. He described the software lifecycle requirements for their medical devices, gave details of their software model and shared tips when seeking CE marking. Dr. Paul Clarke from the Regulated Software Research Centre in Dundalk Institute of Technology presented medical device software development standards. He described their work in DkIT and their involvement in the development of standards for medical devices. The presentations were followed by a lively and interesting panel discussion chaired by Brendan O' Malley.

Model Driven Engineering – Why hasn't it reached its full potential?

Emeritus Professor Jean Bezivin from the University of Nantes gave a very interesting and comprehensive overview of Model Driven Engineering. He described how Model Driven Engineering did not deliver all the promises of "Model Once, Generate Anywhere", but concluded that a new role for Model Driven Engineering may be found at the core of software engineering, data engineering, system engineering, business engineering and other engineering fields. Aidan Clarke from IBM provided a very realistic and interesting insight into the use of MDE at IBM. He introduced Yourdan, Shlaer-Mellor, UML, BPMN 2.0 to IBM. Aidan presented a number of IBM case studies and discussed the pros and cons of MDE. Dr. Goetz Botterweck's presentation on Model-driven Product Lines described how product lines practices can be combined with MDE techniques to improve productively and deal with families of products in a systematic way. The presentations were followed by a lively and interesting panel discussion chaired by Dr. Goetz Botterweck.

Dr Goetz Botterweck

Security and Privacy in a Digital World

Dr Liliana Pasquale

A Lero Industry Event "Security and Privacy in a Digital World" took place at the Irish Computer Society on Thursday evening May 16th. Dr. Liliana Pasquale, a post-doctoral researcher with Lero at the University of Limerick presented her work on "An Asset-Centric Approach For Engineering Adaptive Security".
See http://code.google.com/p/securitas/downloads/list for more information on this tool.
Mark Crosbie, Head of Information Security at Facebook, gave a very interesting insight into security and privacy issues at Facebook.
Dr. Pavel Galdyshev from Lero at University College Dublin presented FRIEBrick. FIREBrick is low-cost open source hardware forensic Disk Imager and Writer Blocker. The presentations were followed by an informative and interesting panel discussion chaired by Professor Joe Carthy from UCD.

Open Forum at NUIG

On Friday 15th March, Lero and NUI Galway researchers Dr. Garry Lohan and Ken Power hosted the seventh in a series of industry-focused open forum sessions on agile and lean software development. This session had a particular focus on decision-making metrics and a presentation on the latest trends and research in decision-making metrics generating a lively discussion among attendees on the metrics they use in their own organisations. The event was held in NUI Galway and was attended by over 20 people from companies such as Celtrak, CSGI, IBM, Sourcedogg, Ericsson, Fidelity Investments and QAD.

Business Benefits of Standards

Rory O'Connor was an invited speaker at an event 'Business Benefits of Standards', jointly organized by the Irish Software Association and the National Standards Authority of Ireland. Brendan O'Malley was also in attendance.

IEEE PIMRC 2013, 8th -11th September, London UK

Soufiene Djahel and John Murphy, Lero @ UCD are organizing a special session on Vehicular Traffic Management for Smart Cities at IEEE.

The rapid increase in the number of vehicles on the roads as well as the growing size of cities have led to a myriad of challenges for road traffic management authorities such as traffic congestion, accidents and air pollution. Over recent years, researchers from both industry and academia were focusing their efforts on exploiting the advances in sensing and communication technologies to improve the efficiency of the existing road Traffic Management Systems (TMS) and mitigate the above issues. However, these efforts are still insufficient to build a reliable and secure TMS that can handle the foreseeable rise of population and cars in future smart cities.

This special session seeks to bring together researchers, scientists and engineers from various research communities, as well as practitioners and administrators who face the challenges of traffic management in smart cities. They are all welcome to present their latest research findings, ideas, simulation tools and applications, and discuss the key unresolved challenges in the topics of this special session.

Future Events

5 presentations re ICGSE 2013 Thursday, 11th July

This 'bumper' session will showcase current research conducted at Lero relating to Global Software Development. Presentations will include five papers to appear in IEEE proceedings of the International Conference of Global Software Engineering (ICGSE) August 2013, in Bari, Italy. See attached for full details.

Talk by Miguel Monasor

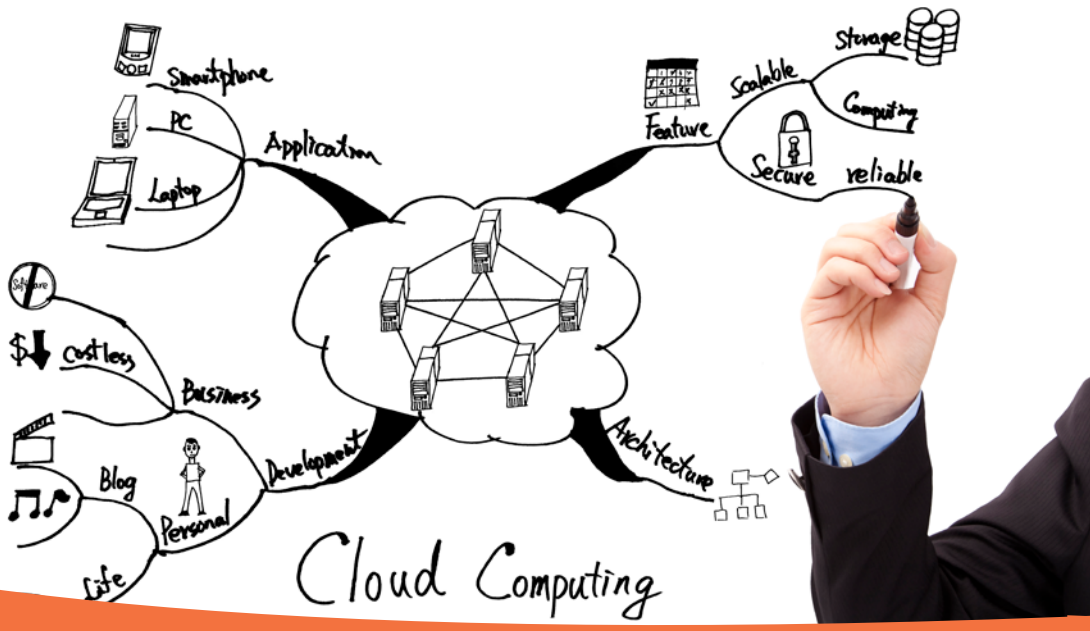
(Miguel is 3rd from left)Miguel Monasor is to give a talk on 23rd July in Lero, Tierney Building UL. Miguel is a PhD student at University of Castilla-La Mancha, Spain. He is currently a research fellow in Lero, The Irish Software Engineering Research Centre. His PhD thesis is titled "A Framework for Training Skills for Global Software Development", which is supervised by Aurora Vizcaíno, Mario Piattini, John Noll and Sarah Beecham. His research interests include GSD and Software Processes. He also has more than five years' experience in the Software Industry as a system's analyst and software developer. Here is a taster of Miguel's talk. 'Today's software practitioners must expect to work in teams that are multi-cultural and spread across different geographic locations. A key challenge of this form of Global Software Development (GSD) is the requirement for stakeholders from different nationalities to communicate effectively. Universities and companies therefore need to design training schemas to deal with the specifics of GSD, which are principally related to communication difficulties caused by geographic, temporal and cultural barriers. This research is focused on designing a training environment, VENTURE, to support members of virtual teams to effectively deal with these problems. In this talk I will present VENTURE, a simulation-based e-learning training platform. VENTURE presents a novel way to train students to communicate more effectively through interacting with Virtual Agents from different countries. Virtual Agents can play several roles in a simulated GSD project (such as developer, tester, customer, etc.). A Virtual Guide will interrupt the conversation when a problem occurs, providing immediate feedback. In order to run the training simulation, a knowledge base containing common communication and procedural GSD problems is applied through a contextual rule-based system.

In this way, VENTURE makes it possible to simulate cultural, linguistic and GSD procedural problems gathered from experience and empirical studies. As an example, the use of direct/indirect style of communication or wrong use of false-friends can be trained in a controlled and accurate manner'.

This talk introduces the framework proposed, providing an overview of the current research activities, results achieved and future objectives.

Cloud Computing Summit

Lorraine Morgan and Kieran Conboy gave a talk entitled "Business Transformation through the Cloud: Fact or Fiction?" at the Cloud Computing Summit (which formed part of the Enterprise Technology World Ireland Summit) held on Tuesday, 18th June at Croke Park Convention Centre.



Conference Papers

Brahmi, I. H., Djahel, S. and Murphy, J. (2013) 'Improving Emergency Messages Transmission Delay in Road Monitoring based WSNs', in 6th Joint IFIP Wireless and Mobile Networking Conference (WMNC'2013), Dubai, United Arab Emirates.

Buckley, J., Mooney, S., Rosik, J. and Ali, N. (2013) 'JITTAC: A Just-In-Time Tool for Architectural Consistency', in The International Conference on Software Engineering (ICSE), San Francisco, USA.

Buglione, L., Lami, G., Wangenheim, C. G. v., McCaffery, F. and Hauck, J. C. R. (2013) 'Leveraging Reuse-related Maturity Issues for Achieving Higher Maturity & Capability Level', in the International Conference on Software Reuse ICSR 2013, Pisa, Italy.

Butterfield, A., Sanan, D. and Hinchey, M. (2013) 'Towards Formal Verification of a Separation Microkernel', in DASIA 2013, annual Eurospace conference, Oporto, Portugal.

Casey, V. and McCaffery, F. (2013) 'The Development and Current Status of Medi SPICE', in The 13th International SPICE Conference on Process Improvement and Capability dEtermination, Bremen, Germany.

Doolan, R. and Muntean, G.-M. (2013) 'VANET-enabled Eco-friendly Road Characteristics-aware Routing for Vehicular Traffic', in IEEE Vehicular Technology Conference on the Transportation, Vehicular Networks, Vehicular Electronics and Telematics Track, Dresden, Germany. (received Best Paper award)

Finnegan, A., McCaffery, F. and Coleman, G. (2013) 'A Process Assessment Model for Security Assurance of Networked Medical Devices', in The 13th International SPICE Conference on Process Improvement and Capability dEtermination, Bremen, Germany.

Fitzgerald, B., Stol, K., O'Sullivan, R. and O'Brien, D. (2013) 'Scaling Agile Methods to Regulated Environments: An Industry Case Study', in Proceedings of 35th International Conference on Software Engineering (ICSE) SEIP track, San Francisco, USA, pp 863-872.

Flood, D., McCaffery, F., Casey, V. and Regan, G. (2013) 'MeD UD – A Process Reference Model for Usability Design in Medical Devices', in South CHI 2013 International Conference on Human Factors in Computing & Informatics, Maribor, Slovenia.

Ghaith, S. (2013) 'Analysis of Performance Regression Testing Data by Transaction Profiles', in Doctoral Symposium at the International Symposium in Software Testing and Analysis, Lugano, Switzerland.

Ghaith, S., Wang, M., Perry, P. and Murphy, J. (2013) 'Automatic, Load-Independent Detection of Performance Regressions by Transaction Profiles', in International Symposium in Software Testing and Analysis (ISSTA 13) Joining AcadeMiA and Industry Contributions to testing Automation (JAMAICA), Lugano, Switzerland.

Han, Y., Fitzpatrick, J., Murphy, L. and Dunne, J. (2013) 'Accuracy Analysis on Call Quality Assessments in Voice over IP', in the 6th Joint IFIP Wireless and Mobile Networking Conference (WMNC'2013), Dubai, United Arab Emirates.

Hashmi, S., Ishikawa, F. and Richardson, I. (2013) 'A Communication Process for Global Requirements Engineering', in International Conference on Software and System Process (ICSSP), co-located with ICSE, San Francisco, USA.

Hussain, I., Djahel, S., Geneiatakis, D. and Nait-Abdesselam, F. (2013) 'A Lightweight Countermeasure to Cope with Flooding Attacks Against Session Initiation Protocol', in The 6th Joint IFIP Wireless and Mobile Networking Conference (WMNC'2013), Dubai, UAE.

Iglesias, J. O., Stokes, N., Ventresque, A., Thorburn, J. and Murphy, L. (2013) 'Towards the Automatic Detection of Efficient Computing Assets in a Heterogeneous Cloud Environment', in IEEE 6th International Conference on Cloud Computing, Santa Clara Marriott, CA, USA.

Jeners, S., Clarke, P., O'Connor, R., Buglione, L. and Lepmets, M. (2013) 'Harmonizing Software Development Processes with Software Development Settings – A Systematic Approach', in the 20th European Conference on Systems, Software and Services Process Improvement (EuroSPI 2013), Dundalk Institute of Technology, Ireland. Springer-Verlag.

Khondhu, J., Capiluppi, A. and Stol, K. (2013) 'Is It All Lost? A Study of Inactive Open Source Projects', in Proceedings of the 9th International Conference on Open Source Systems, Koper-Capodistria, Slovenia.

Krishnamurthy, A. and O'Connor, R. (2013) 'An Analysis of the Software Development Processes of Open Source E-Learning Systems', in 20th European Conference on Systems, Software and Services Process Improvement (EuroSPI 2013), Springer-Verlag.

Kroll, J., Prikladnicki, R., Audy, J. L. N., Carmel, E. and Fernandez, J. (2013) 'A Feasibility Study of Follow-the-Sun Software Development for GSD Projects', in International Conference on Software Engineering and Knowledge Engineering (SEKE 2013), Boston, USA.

Li, X., Ventresque, A., Stokes, N., Thorburn, J. and Murphy, J. (2013) 'iVMp: an Interactive VM Placement Algorithm for Agile Capital Allocation', in IEEE 6th International Conference on Cloud Computing, Santa Clara Marriott, CA, USA

MacMahon, S. T., McCaffery, F. and Keenan, F. (2013) 'The Approach to the Development of an Assessment Method for IEC 80001-1', in The 13th International SPICE Conference on Process Improvement and Capability dEtermination, Bremen, Germany.

MacMahon, S. T., McCaffery, F. and Keenan, F. (2013) 'Risk Management of Medical IT Networks: An ISO/IEC 15504 Compliant Approach to Assessment against IEC 80001-1', in International Conference on Software and Systems Processes ICSSP 2013, San Francisco, CA, USA, ACM.

McHugh, M., Ali, A. and McCaffery, F. (2013) 'The Significance of Requirements in Medical Device Software Development', in European Systems and Software Process Improvement and Innovation Conference EuroSPI Dundalk, Ireland. (received Best Paper award)

McHugh, M. and McCaffery, F. (2013) 'Challenges experienced by Medical Device Software Organisations while following a Plan-driven Software Development lifecycle', in European Systems and Software Process Improvement and Innovation Conference EuroSPI Dundalk, Ireland.

McHugh, M., McCaffery, F., Fitzgerald, B., Stol, K., Casey, V. and Coady, G. (2013) 'Balancing Agility and Discipline in a Medical Device Software Organisation', in Proceedings of the 13th International SPICE Conference, Bremen, Germany.

Monasor, M. J., Vizcaíno, A., Piattini, M., Noll, J. and Beecham, S. (2013) 'Simulating Global Software Development processes for use in Education: A Feasibility Study', in 20th EuroSPI Conference, Dundalk Institute of Technology, Ireland.

Morgan, L. and Conboy, K. (2013) 'Factors Affecting the Adoption of Cloud Computing: An Exploratory Study', in ECIS 21st European Conference on Information Systems 2013 Utrecht.

O'Connor, R. and Sanders, M. (2013) 'Lessons from a Pilot Implementation of ISO/IEC 29110 in a Group of Very Small Irish Companies', in Proceedings 13th International Conference on Software Process Improvement and Capability dEtermination (SPICE 2013), University of Bremen, Germany, Springer-Verlag.

O'Dwyer, O. and Conboy, K. (2013) 'A Conceptual Framework for Understanding Clan Control in ISD Project Teams', in 21st European Conference on Information Systems (ECIS 2013), Utrecht University, The Netherlands.

Omoronyia, I., Cavallaro, L., Salehie, M., Pasquale, L. and Nuseibeh, B. (2013) 'Engineering Adaptive Privacy: on the role of privacy awareness requirements', in ICSE 2013, San Francisco, USA.

Pasquale, L., Spoletini, P., Pometto, D., Blasi, F. and Redaelli, T. (2013) 'Requirements Engineering Meets Physiotherapy: An Experience with Motion-Based Games', in 19th Working Conference on Requirements Engineering: Foundation for Software Quality (REFSQ 2013), Essen, Germany.

Regan, G., McCaffery, F., Daid, K. M. and Flood, D. (2013) 'Investigation of Traceability within a Medical Device Organization', in The 13th International SPICE Conference on Process Improvement and Capability dEtermination, Bremen, Germany.

Souza, L., O'Leary, P. and Al Meida, E. (2013) 'Understanding the Derivation Process Using a Health Informatics Case Study', in the 20th EuroSPI Conference, Dundalk Institute of Technology, Ireland.

Vassev, E. and Hinchey, M. (2013) 'Implementing Artificial Awareness with KnowLang', in Proceedings of the IEEE International Systems Conference (SysCon2013), Orlando, Florida, USA, pp 18-19.

Vassev, E. and Hinchey, M. (2013) 'Knowledge-Based Self-Adaption', in Sixth Latin-American Symposium on Dependable Computing (LADC 2013), Rio de Janeiro, Brazil.