



October 17th - 20th, 2011

WCRE 2011
18th Working Conference on Reverse Engineering

Lero, Limerick, Ireland



Conference Programme

WCRE 2011

Lero, University of Limerick, Ireland

17th to 20th October 2011



Reengineering Forum



WCRE 2011

Sunday, October 16, Carlton Castletroy Park Hotel -Lobby

18:00 – 20:00	Welcome Reception & Early Registration
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Monday, October 17, Lero, Tierney Building

8:30 – 9:00	Registration in Lero, 3 rd Floor Foyer
9:00 – 9:15	WCRE Opening Session in Rooms T3-013 and T3-014
9:15 – 10:30	Keynote – Professor Mike Hinchey - in Rooms T3-013 and T3-014 "Evolving Critical Systems"
10:30 – 11:00	Coffee Break – 4 th Floor
11:00 – 12:30	<p>Research Track 1 – Clones (Session Chair: Giuseppe Scanniello, Rooms T3-013 and T3-014)</p> <p>Incremental Code Clone Detection: A PDG-based Approach -Yoshiki Higo, Yasushi Ueda, Minoru Nishino and Shinji Kusumoto</p> <p>On the Effectiveness of Simhashing in Clone Detection on Large Scale Software System - Sharif Uddin, Chanchal K. Roy, Kevin A. Schneider , Abram Hindle</p> <p>Internet-scale Real-time Code Clone Search via Multi-level Indexing (SHORT)- Iman Keivanloo, Juergen Rilling and Philippe Charland</p> <p>An Investigation into the Impact of Software Licenses on Copy-and-Paste Reuse among OSS Projects (SHORT) - Yu Kashima, Yasuhiro Hayase, Norihiro Yoshida, Yuki Manabe and Katsuro Inoue</p>

Please remember that WCRE is a discussion-oriented working conference. Paper presentations are limited to 20 minutes (short papers 10 minutes) plus one or two clarifying questions. Then, there is a general discussion in the room about the state of the art and research on the topic/theme of the session, not just about those particular papers.

Colour Legend

Research Track	Keynote	Industrial Track	Doctoral Symposium	Tool Demonstration	WCRE Events
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Monday, October 17, Lero, Tierney Building

12:30 – 14.00	Lunch in the Eden Restaurant - Main Building	
14:00 – 15:30.	Research Track 2 – Comprehension I <i>(Session Chair: Abram Hindle, Rooms T3-013 and T3-014)</i>	Industrial Track <i>(Session Chair: Jim Buckley, Room T3-001)</i>
	Automatic Segmentation of Method Code into Meaningful Blocks to Improve Readability - Xiaoran Wang, Lori Pollock and K Vijay-Shanker	Application Architecture Discovery – A Step Towards Domain-driven, Easily-Extensible Code Structure - Hitesh Sajnani, RavindraNaik and Cristina Lopes
	Requirements Traceability for Object Oriented Systems by Partitioning Source Code - Nasir Ali, Yann-Gaël Guéhéneuc and Giuliano Antoniol	Renovation by Machine-Assisted Program Transformation in Production Reporting and Integration - Sava Mintchev
	Can we predict dependencies using domain information? - Amir Aryani, Fabrizio Perin, Mircea Lungu, Abdun Naser Mahmood and Oscar Nierstrasz	Reconstructing traceability between bugs and test cases: an experimental study - Nilam Kaushik, Ladan Tahvildari and Mark Moore
15:30 – 16.00.	Coffee Break – 4th Floor	
16:00 – 17:30.	Research Track 3 – Comprehension II <i>(Session Chair: Carmine Gravino, Rooms T3-013 and T3-014)</i>	
	Assessing the Documentation of Design Patterns on Source Code Comprehension: Results from Two Controlled Experiments - Giuseppe Scanniello, Genny Tortora, Michele Risi and Carmine Gravino	
	Towards the Extraction of Domain Concepts from the Identifiers - Surafel Lemma Abebe and Paolo Tonella	
	Reverse Engineering Co-maintenance Relationships Using Conceptual Analysis of Source Code (SHORT) - Scott Grant, James R. Cordy and David Skillicorn	
	Concern Localization using Information Retrieval: An Empirical Study on Linux Kernel (SHORT) - Shaowei Wang, David Lo, Zhenchang Xing and Lingxiao Jiang	
18.45	Social Event: Dolan’s Pub, buses depart at 6.45pm from the Tierney Building, Carlton Castletroy Park Hotel & Kilmurry Lodge Hotel	

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Tuesday, October 18, Lero, Tierney Building

8:30 – 9:00	Registration in Lero, 3rd Floor Foyer	
9:00 – 10:30	Research Track 4 – APIs <i>(Session Chair: Mircea Lungu, Rooms T3-013 and T3-014)</i>	Doctoral Symposium <i>(Session Chair: Michelle Lanza and Radu Marinescu, Room T3-001)</i>
	Exploring the Intent behind API Evolution: A Case Study- <i>Daqing Hou and Xiaojia Yao</i> A Framework Profile of .NET - <i>Ralf Laemmel, Rufus Linke, Ekaterina Pek and Andrei Varanovich</i> Useful, but usable? Factors Affecting the Usability of APIs (SHORT) - <i>Minhaz Zibran, Farjana Eishita and Chanchal Roy</i>	Recovering Test-to-Code Traceability via Slicing and Conceptual Coupling - <i>Abdallah Qusef</i> In-Memory Database Support for Source Code Search and Analytics - <i>Oleksandr Panchenko</i> Extending Bug Localization Using Information Retrieval and Code Clone Location Techniques - <i>Matthew Beard</i>
10:30 – 11:00	Coffee Break – 4th Floor	
11:00 12:30	Research Track 5 – Code Search <i>(Session Chair: Denys Poshyvanyk, Rooms T3-013 and T3-014)</i>	Formal Tool Demonstration <i>(Session Chair: Mircea Lungu, Room T3-001)</i>
	Locating the Meaning of Terms in Source Code - <i>Jan Nonnen, Daniel Speicher and Paul Imhoff</i> Approximate Code Search in Program Histories – <i>Saman Bazrafshan, Rainer Koschke and Nils Göde</i> Code Search via Topic-Enriched Dependency Graph Matching (SHORT) - <i>Shaowei Wang, David L, Lingxiao Jiang</i> Measuring the Accuracy of Information Retrieval Based Bug Localization Techniques (SHORT) - <i>Matthew Beard, Nicholas A. Kraft, Letha Etzkorn and Stacy Lukins</i>	
12:30 – 14:00	Lunch – Pizza - 4th Floor	
14:00 – 15:30	Stevens Award Lecture – Philip Newcomb - in Rooms T3-013 and T3-014 "Architecture-Driven Modernization of the European Air Traffic Management System"	
15:30 – 16:00	Coffee Break 4th Floor	
16:00 – 17:30	Research Track 6 – Security <i>(Session Chair: Martin Pinzger, Rooms T3-013 and T3-014)</i>	Informal Tool Demonstration <i>(Session Chair: Mircea Lungu, Room T4-001)</i>
	Automatic Extraction of Secrets from Malware - <i>Ziming Zhao, Gail-Joon Ahn and Hongxin Hu</i> Reverse Engineering of Protocols from Network Traces – <i>João Antunes, Nuno Neves and Paulo Verissimo</i> An Android Security Case Study with Bauhaus (SHORT) – <i>Karsten Sohr, Bernhard Berger and Michaela Bunke</i> An Exploratory Study of Software Reverse Engineering in a Security Context (SHORT) – <i>Christoph Treude, Fernando Figueira Filho, Margaret-Anne Storey and Martin Salois</i>	
18.00.	WCRE Banquet– Bunratty Castle Medieval Banquet, buses depart at 6pm from the Tierney Building, Carlton Castletroy Park & Kilmurry Lodge Hotel	

Wednesday, October 19, Lero, Tierney Building

9:00 – 10:30	Most Influential Paper – Leon Moonen - in Rooms T3-013 and T3-014 WCRE 2001: "Robust Parsing using Island Grammars Revisited"
10:30 – 11:00	Coffee Break 4th Floor
11:00 – 12:30	Research Track 7 – Bugs <i>(Session Chair: Peggy Storey, Rooms T3-013 and T3-014)</i>
	How Long does a Bug Survive? An Empirical Study - Gerardo Canfora, Michele Ceccarelli, Luigi Cerulo and Massimiliano Di Penta
	A preliminary evaluation of text-based and dependency-based techniques for determining the origins of bugs - Steven Davies, Marc Roper, Murray Wood Got Issues? Do New Features and Code Improvements Affect Defects? (SHORT) - Daryl Posnett, Abram Hindle and Prem Devanbu
12:30 – 14:00	Lunch in the Eden Restaurant - Main Building
14:00 – 15:30	Research Track 8 – Quality <i>(Session Chair: Daqing Hou, Rooms T3-013 and T3-014)</i>
	Impact of Installation Counts on Perceived Quality: A Case Study on Debian - Israel Herraiz, Emad Shihab, Thanh H. D. Nguyen and Ahmed E. Hassan
	Monitoring Software Quality Evolution by Analyzing Deviation Trends of Modularity Views - Tianmei Zhu, Yijian Wu, XinPeng, Zhenchang Xing, Wenyun Zhao
	An Empirical Validation of the Benefits of Adhering to the Law of Demeter (SHORT) - Yi Guo, Michael Würsch, Emanuel Giger and Harald Gall Assessing Software Quality by Program Clustering and Defect Prediction (SHORT) - Xi Tan, Xin Peng, Sen Pan and Wenyun Zhao
15:30 – 16:00	Coffee Break 4th Floor
16:00 – 17:30	Research Track 9 – Dynamic Analysis <i>(Session Chair: David Lo, Rooms T3-013 and T3-014)</i>
	Object-Based Dynamic Protocol Recovery for Multi-Threading Programs - Bernhard Scholz and Rainer Koschke
	An Entropy Evaluation Approach for Triaging Field Crashes: A Case Study of Mozilla Firefox – Foutse Khomh, Brian Chan, Ying Zou and Ahmed E. Hassan
	Meta-Level Runtime Feature Awareness for Java (SHORT) – Andrzej Olszak, Martin Rytter and Bo Nørregaard Jørgensen Using Dynamic Analysis and Clustering for Implementing Services by Reusing Legacy Code (SHORT) - Andreas Fuhr, Tassilo Horn and Volker Riediger
19:30	Social Event: Scholars Club (UL Campus)

Thursday, October 20, Lero, Tierney Building

8:30 – 10:00.	Research Track 10 – Reverse Engineering <i>(Session Chair: Chanchal Roy, Rooms T3-013 and T3-014)</i>
	Reverse Engineering of Mobile Application Lifecycles – <i>Dominik Franke, Corinna Elsemann, Carsten Weise and Stefan Kowalewski</i>
	Reverse Engineering of Event Handlers of RAD-Based Applications - <i>Óscar Sánchez Ramón, Jesús Sánchez Cuadrado and Jesus Garcia-Molina</i>
	Analyzing the Source Code of Multiple Software Variants for Reuse Potential (SHORT) – <i>Slawomir Duszynski, Jens Knodel and Martin Becker</i> Reverse Engineering Feature Models From Programs’ Feature Sets (SHORT) - <i>Evelyn Nicole Haslinger, Roberto Erick Lopez-Herrejon and Alexander Egyed</i>
10.00 – 10.30 .	WCRE Management & Announcements - Rooms T3-013 and T3-014
10:30 – 11:00.	Coffee Break – 4th Floor
11:00– 12:30	Research Track 11 – Evolution <i>(Session Chair: Jens Knodel, Rooms T3-013 and T3-014)</i>
	Make it or Break it: Mining Anomalies in Linux Kbuild - <i>Sarah Nadi and Ric Holt</i>
	A Novel Analysis of Co-change – <i>Fehmi Jaafar, Yann-Gaël Guéhéneuc, Sylvie Hamel and Giuliano Antoniol</i> An Exploratory Study of the Evolution of Communicated Information about the Execution of Large Software Systems - <i>Weiyi Shang, Zhen Ming Jiang, Bram Adams, Ahmed E. Hassan, Mike Godfrey, Mohamed Nasser and Parminder Flora</i>
12:30 – 14.00	Lunch in the Eden Restaurant – Main Building
14:00 – 15:30	Research Track 12 – Binary Analysis and Refactoring <i>(Session Chair: Jim Cordy, Rooms T3-013 and T3-014)</i>
	SmartDec: approaching C++ decompilation - <i>Alexander Fokin, Yegor Derevenets, Katerina Troshina and Alexander Chernov</i>
	Precise Static Analysis of Binaries by Extracting Relational Information - <i>Alexander Sepp, Bogdan Mihaila and Axel Simon</i>
	Refactoring Traditional Forms into Ajax-enabled Forms (SHORT) - <i>Ming Ying and James Miller</i> An Empirical Study of Refactoring in the Context of FanIn and FanOut Coupling (SHORT) - <i>Alessandro Murgia, Roberto Tonelli, Giulio Concas, Michele L. Marchesi and Steve Counsell</i>

Thursday, October 20, Lero, Tierney Building

15:30 – 16:00	Coffee Break – 4th Floor
	Research Track 13 – Developers and Modularization <i>(Session Chair: Bram Adams, Rooms T3-013 and T3-014)</i>
	Recommending People in Developers' Collaboration Network – <i>Didi Surian, Nian Liu, David Lo, Hanghang Tong, Ee-Peng Lim and Christos Faloutsos</i>
16:00 – 17:15.	Reasoning over the evolution of source code with quantified regular path expressions (SHORT) - <i>Andy Kellens, Coen De Roover, Carlos Noguera, Reinout Stevens and Viviane Jonckers</i>
	Modularization Metrics: Assessing Package Organization in Legacy Large Object-Oriented Software (SHORT) - <i>Hani Abdeen, Stephane Ducasse and Houari Sahraoui</i>
17:15 – 17:45.	WCRE Summary Discussion – Rooms T3-013 and T3-014