



QSIC 2005

FIFTH INTERNATIONAL CONFERENCE ON QUALITY SOFTWARE
EDEN ON THE PARK HOTEL, MELBOURNE, AUSTRALIA,
SEPTEMBER 19 – 20, 2005

FINAL PROGRAM

Time	Sunday, September 18, 2005		
4:30pm – 6:00pm	Registration <i>Lobby Level 1</i>		
Time	Monday, September 19, 2005		
8:30am – 9:00am	Registration <i>Lobby Level 1</i>		
9:00am – 9:30am	Greetings <i>Convention Room 4</i> Program Co-Chairs and Steering Committee Chair		
9:30am – 10:30am	Keynote Speech <i>Convention Room 4</i> Integrating Environments into Software Testing <i>Mary Lou Soffa</i>		
10:30am – 11:00am	Tea Break <i>Lobby Level 1</i>		
11:00am – 12:30pm	Session 1A Software Testing I <i>Convention Room 4</i> Model-Based Testing of Concurrent Programs with Predicate Sequencing Constraints (<i>P. Wu and H. Lin</i>) Test Order for Class-based Integration Testing of Java Applications (<i>N.L. Hashim, H.W. Schmidt, and S. Ramakrishnan</i>) On the Test Case Definition for GUI Testing (<i>K.Y. Cai, L. Zhao, H. Hu, and C.H. Jiang</i>)	Session 1B Software Quality <i>Convention Room 3</i> Peer Reviews in Real Life - Motivators and Demotivators (<i>L. Harjumaa, I. Tervonen, and A. Huttunen</i>) Towards the UML Evaluation Using Taxonomic Patterns on Meta-Classes (<i>H. Ma, Z. Ji, W. Shao, and L. Zhang</i>) Preliminary Evaluation of Software Inspection Tools (<i>H. Hedberg and J. Lappalainen</i>)	ISEAT 2005 – Session 1 <i>Convention Room 2</i> Caste-Centric Agent-Oriented Programming (<i>J. Wang, R. Shen, and H. Zhu</i>) Enabling Agent-based Management of Web Services with WS2JADE (<i>X. Nguyen and R. Kowalczyk</i>) Guiding Agent-oriented Requirements Elicitation: HOMER (<i>D. Wilmann and L. Sterling</i>)
	Lunch <i>Convention Room 5</i>		
1:30pm – 3:00pm	Session 2A Software Modeling and Testing <i>Convention Room 4</i> Identification of Categories and Choices in Activity Diagrams (<i>T.Y. Chen, P.L. Poon, S.F. Tang, and T.H. Tse</i>) Test Case Generation by OCL Mutation and Constraint Solving (<i>B.K. Aichernig and P.A.P. Salas</i>) Action Machines – Towards a Framework for Model Composition, Exploration and Conformance Testing (<i>W. Grieskamp, N. Tillmann, C. Campbell, W. Schulte, and M. Veanes</i>)	Session 2B Web Based Development <i>Convention Room 3</i> Cost and Response Time Simulation for Web-based Applications on Mobile Channels (<i>M. Book, V. Gruhn, M. Hülder, and A. Köhler</i>) Quality Assurance in the Design of Web Information Systems (<i>A. Binemann-Zdanowicz, K.-D. Schewe, B. Thalheim, and J. Zhao</i>) Stochastic Voting Algorithms for Web Services Group Testing (<i>W.T. Tsai, D. Zhang, R. Paul, and Y. Chen</i>)	ISEAT 2005 – Session 2 <i>Convention Room 2</i> Towards Making Agent UML Practical: A Textual Notation and a Tool (<i>M. Winikoff</i>) Design Patterns for Agent-based Service Composition in the Web (<i>I. Müller, P. Braun, and R. Kowalczyk</i>) Tool Support for Agent Development using the Prometheus Methodology (<i>L. Padgham, J. Thangarajah, and M. Winikoff</i>)
	Tea Break <i>Lobby Level 1</i>		
3:30pm – 5:00pm	Session 3A Formal Methods <i>Convention Room 4</i> Verification of C Programs using Slicing Execution (<i>X. Yi, J. Wang, and X. Yang</i>) Automatic Generation of Analyzable Failure Propagation Models from Component-Level Failure Annotations (<i>L. Grunske and B. Kaiser</i>) Formal Fault Tree Analysis of State Transition Systems (<i>J. Xiang, K. Ogata, and K. Futatsugi</i>)	Session 3B Software Components <i>Convention Room 3</i> A Case Study of the Recursive Least Squares Estimation Approach to Adaptive Testing for Software Components (<i>H. Hu, W.E. Wong, C.-H. Jiang, and K.-Y. Cai</i>) A Multi-Property Trust Model for Reconfiguring Component Software (<i>M. Zhou, H. Mei, and L. Zhang</i>) Measuring the Complexity of a UML Component Specification (<i>S. Mahmood and R. Lai</i>)	ISEAT 2005 – Session 3 <i>Convention Room 2</i> Systematic Incremental Development of Agent Systems, using Prometheus (<i>M. Pereplechikov and L. Padgham</i>) The Genesis of a Pattern Language for Agent-based Enterprise Systems (<i>P. Taylor, P. Evans-Greenwood, and J. Odell</i>) Towards Goal-Oriented Design of Agent Systems (<i>J. Khallouf and M. Winikoff</i>)
	Gathering <i>Hotel Lobby</i>		
5:00pm – 5:15pm	Bus Travel to Banquet Location		
5:15pm – 6:00pm	Conference Banquet		
6:00pm – 9:30pm	<i>Boat Cruise on MV Mandalay from Shed 14, Victoria Harbour, Docklands</i>		
9:30 – 10:00pm	Bus Travel back to Conference Hotel		



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Time	Tuesday, September 20, 2005		
8:30am – 9:00am	Registration <i>Lobby Level 1</i>		
9:00am – 10:30am	Session 4A Software Architecture <i>Convention Room 4</i> Replication for Adaptive Responsiveness in Service-Oriented Systems (<i>S.S. Yau, G. Goyal, and Y. Yao</i>) Capturing and Using Software Architecture Knowledge for Architecture-based Software Development (<i>M.A. Babar, I. Gorton, and R. Jeffery</i>) Runtime Validation of Behavioural Contracts for Component Software (<i>Y. Jin and J. Han</i>)	Session 4B Database Modeling and Applications <i>Convention Room 3</i> Fault-Based Testing of Database Application Programs with Conceptual Data Model (<i>W.K. Chan, S.C. Cheung, and T.H. Tse</i>) Proving the Safety of SQL Queries (<i>S. Brass and C. Goldberg</i>) Higher Order Entity Relationship Modeling with UML (<i>A. Tretiakov and S. Hartmann</i>)	ETQSE 2005 – Session 1 <i>Convention Room 2</i> Teaching Automated Test Case Generation (<i>T.Y. Chen, F.-C. Kuo, and Z.Q. Zhou</i>) Dynamic Curriculum Delivery: Closing the Loop with Courseware Providers (<i>A. Fisher and J.F. Lehman</i>) Designing Activities for Learning Software Quality Practices (<i>Y.T. Yu and P.-L. Poon</i>)
10:30am – 11:00am	Tea Break <i>Lobby Level 1</i>		
11:00am – 12:30pm	Session 5A Requirements Engineering <i>Convention Room 4</i> Modeling Software Characteristics and Their Correlations in A Specific Domain by Comparing Existing Similar Systems (<i>A. Osada, D. Ozawa, H. Kaiya, and K. Kaijiri</i>) Ontology-based Requirements Analysis: Lightweight Semantic Processing Approach (<i>H. Kaiya and M. Saeki</i>) Domain Consistency in Requirements Specification (<i>S. Acharya, H. Mohanty, C. George, and R.K. Shyamasundar</i>)	Session 5B Software Testing II <i>Convention Room 3</i> A Metamorphic Approach to Integration Testing of Context-Sensitive Middleware-based Applications (<i>W.K. Chan, T.Y. Chen, H. Lu, T.H. Tse, and S.S. Yau</i>) A Method of Generating Massive Virtual Clients and Model-based Performance Test (<i>G.-B. Kim</i>) An Ant Colony Optimization Approach to Test Sequence Generation for State-based Software Testing (<i>H. Li and C.P. Lam</i>)	ETQSE 2005 – Session 2 <i>Convention Room 2</i> A System to Mark Programs Automatically (<i>K. Ngo-Pham, J. Bigham, J. Rodaway, and L. Tokarchuk</i>) Teaching Three Quality Assurance Techniques in Tandem: Lessons Learned (<i>C. Kutay and M.A. Babar</i>) Software Testing Education and Training in Hong Kong (<i>F.T. Chan, T.H. Tse, W.H. Tang, and T.Y. Chen</i>)
12:30pm – 1:30pm	Lunch <i>Convention Room 5</i>		
1:30pm – 3:00pm	Session 6A Software Metrics and Tools <i>Convention Room 4</i> Study on Application of a Quantitative Evaluation Approach for Software Architecture Adaptability (<i>X. Liu and Q. Wang</i>) GcpSensor: A CPU Performance Tool for Grid Environments (<i>D. Guo, L. Hu, M. Zhang, and Z. Zhang</i>) Case Studies: The Potential Teaching Instruments for Software Engineering (<i>V. Varma and K. Garg</i>)	GPWW 2005 – Session 1 <i>Convention Room 3</i> A Peer-to-Peer Architecture for Workflow in Virtual Enterprises (<i>J. Noll</i>) A Data Mining-based Framework for Grid Workflow Management (<i>A. Congiusta, G. Greco, A. Guzzo, G. Manco, L. Pontieri, D. Saccà, and D. Talia</i>) Scalable Enterprise Level Workflow Manager for the Grid (<i>R.A. Dheepak, S. Ali, I. Gupta, H. Dave, A.K. Upadhyay, L.D. Alves, A. Damodaran, A. Chakrabarti, and A. Ghosh</i>)	SEIW 2005 – Session 1 <i>Convention Room 2</i> Relevant Past Performance for Selecting Web Services (<i>W. Sherchan, S. Krishnaswamy, and S.W. Loke</i>) An Operational Semantics for DFM, a Formal Notation for Modelling Asynchronous Web Services (<i>J. Yang, C. Cirstea, and P. Henderson</i>) Operating Guidelines – An Automata-theoretic Foundation for the Service-Oriented Architecture (<i>P. Massuthe and K. Schmidt</i>)
3:00pm – 3:30pm	Tea Break <i>Lobby Level 1</i>		
3:30pm – 4:30pm or 3:30pm – 5:00pm (30 min. per paper)	Session 6B Real-time Applications <i>Convention Room 4</i> An Efficient Consistency Management Algorithm for Real-Time Mobile Collaboration (<i>S. Citro, J. McGovern, and C. Ryan</i>) Principles of Timing Anomalies in Superscalar Processors (<i>I. Wenzel, R. Kirner, P. Puschner, and B. Rieder</i>)	GPWW 2005 – Session 2 <i>Convention Room 3</i> A Service Workflow Management Framework based on Peer-to-Peer and Agent Technologies (<i>J. Yan, Y. Yang, R. Kowalczyk and X.T. Nguyen</i>) Scientific Workflow Management: Between Generality and Applicability (<i>Z. Zhao, A. Belloum, A. Wibisono, F. Terpstra, P.T. de Boer, P. Sloot, and B. Hertzberger</i>)	SEIW 2005 – Session 2 <i>Convention Room 2</i> Towards a Metamorphic Testing Methodology for Service-Oriented Software Applications (<i>W.K. Chan, S.C. Cheung, and K.R.P.H. Leung</i>) Interactive Visualisation and Testing of Jini Services (<i>B. Quig, J. Rosenberg, M. Kölling, and P. Steele</i>) OMWSC – An Ontology-based Model for Web Services Composition (<i>J. Ma and Y. Zhang</i>)