APAQS 2001
Second Asia-Pacific Conference on Quality Software
New World Renaissance Hotel, Hong Kong, 10-11 December 2001
Final Program
http://www.cs.cityu.edu.hk/~apaqs

Day 1: 10 December 2001 (Monday)

8:00 - 8:30 Registration
8:30 - 8:50 Opening Session
   - Session Chair: P.T. Ho
   - Welcome Address from the General Chair
   - Lee, Executive Director, Vocational Training Council, Hong Kong
   - Program Overview: Y.T. Yu and Y.T. Chen, Program Co-Chairs

8:50 - 9:50 Keynote Session 1
   - Session Chair: Peter C. Poule
   - New Perspectives in Software Engineering — Observations, Obstacles and Opportunities
   - C.V. Ramamoorthy, University of California at Berkeley, USA

9:50 - 10:30 Tea Break

10:30 - 12:00 Parallel Sessions 1

Session 1A: Program Analysis I
   - Session Chair: H.F. Leung
   - Analysis and Implementation Method of Program to Detect Inappropriate Information Leak
   - Computing Executable Slices for Concurrent Logic Programs
   - J. Zhao, J. Cheng, and K. Ushijima
   - Exception Analysis for Multithreaded Java Programs
   - S. Rya and K. Yi

Session 1B: Software Reliability
   - Session Chair: Kai-Yuan Cai
   - An Analysis of Software Correctness Prediction Methods
   - P. Kokol, V. Podgorelec, M. Zorman, M. Sproger, and M. Pighin
   - A Fast Algorithm to Compute Maximum Likelihood Estimates for the Hypergeometric Software Reliability Model
   - F. Padberg
   - An Ordinal-Time Reliability Model Applied to "Big-Bang" Suite-Based Testing
   - N. Davidson

Session 1C: Software Quality
   - Session Chair: John Jenkins
   - Incremental Quality Network
   - S. Coronado and J. Jan
   - Strong Drivers of Software Quality: Beyond External and Internal Software Quality
   - R. Fitzpatrick
   - Using a Coding Standard to Improve Program Quality
   - X. Fang

12:00 - 14:00 Lunch (at Lobby Lounge)

14:00 - 15:00 Parallel Sessions 2

Session 2A: Program Analysis II
   - Session Chair: P.K. Wong
   - Object-Oriented Program Behavior Analysis Based on Control Patterns
   - C.-C. Hwang, S.-K. Huang, D.-J. Chen, and D. Chen
   - A Path-Based Approach to the Detection of Infinite Looping
   - J. Zhang

Session 2B: Quality Metrics
   - Session Chair: T.Y. Chen
   - Assurance of Conceptual Data Model Quality Based on Early Measures
   - M. Genero, M. Pettuti, and C. Calero
   - M. Saboe

Session 2C: Software Development I
   - Session Chair: K. Kishida
   - Why Software Engineering is Riskier than Ever
   - A. Fuller, P. Croll, and O. Garcia
   - On Prediction of Cost and Duration for Risky Software Projects Based on Risk Questionnaire
   - O. Mizuno, T. Adachi, T. Kikuno, and Y. Takagi

15:00 - 15:30 Tea Break

15:30 - 17:00 Parallel Sessions 3

Session 3A: Formal Methods I
   - Session Chair: T.Y. Cheung
   - Partial Validation of a Design Specification with Respect to Requirements
   - C. Besse, A. Cavalli, and F. Khender
   - Constructing Hardware/Software Interface Using Protocol Converters
   - S. Qiu, Z. Qiu, and J. He
   - Class and Module in SOFL
   - S. Liu and J. Dong

Session 3B: Testing I
   - Session Chair: M.L. Lau
   - Optimal Test Profile in the Context of Software Cybernetics
   - K.-Y. Cai
   - Testable Use Cases in the Abstract State Machine Language
   - W. Grieskamp, M. Lepper, W. Schulte, and N. Tillmann
   - Experience Report on Conformance Tests for CORBA ORBs
   - M. Li, A. Rennock, J. Schieferecker, D. Witsack, O. Halabii, A. Voifou, and A. Yin

Session 3C: Software Development II
   - Session Chair: Y.K. Leung
   - Railway Power SCADA System Commissioning "Case Example"
   - I. Hampton and K. Lam
   - Stakeholder Discovery and Classification Based on Systems Science Principles
   - O. Press and A. Wegmann
   - Quality & People in the Development of Situationally Specific Methods
   - S. Young, S. McDonald, H. Edwards, and J. Thompson
   - A Risk-Driven Design Model for Embedded System
   - Y. Dong and M. Li

18:30 - 21:30 Conference Banquet (at Peking Garden Restaurant)

Day 2: 11 December 2001 (Tuesday)

9:00 - 10:00 Keynote Session 2
   - Session Chair: T.H. Tse
   - End-to-End Integration Testing
   - Raymond Paul, Department of Defense, Washington, DC, USA

10:00 - 10:30 Tea Break

10:30 - 12:00 Parallel Sessions 4

Session 4A: Formal Methods II
   - Session Chair: Jin Song Dong
   - Incremental Fault-Tolerant Design in an Object-Oriented Setting
   - E. Johnsen, O. Owe, E. Munthe-Kaas, and J. Vain
   - PAFA at Work: Comparing the Worst-Case Efficiency of Three Buffer Implementations
   - F. Coreadini, M. Di Berardini, and W. Vogler
   - DLOTOS: A LOTOS Extension for Clock Synchronization in Distributed Systems
   - W. Hassan

Session 4B: Testing II
   - Session Chair: P.L. Poon
   - Combining the Animation and Testing of Abstract Data Types
   - T. Miller and P. Stroustrup
   - A Selective Software Testing Method Based on Priorities Assigned to Functional Modules
   - M. Hirayama, T. Yamamoto, J. Okaya, O. Mizuno, and T. Kikuno
   - URL-Driven Automated Testing
   - R. Pen

Session 4C: Process Models and Tools
   - Session Chair: Ho-Won Jung
   - A Tailored Capability Model for Inspection Process Improvement
   - I. Tervonen, J. Iisakka, and L. Harjumaa
   - A Path to Virtual Software Inspection
   - L. Harjumaa, H. Hedberg, and I. Tervonen
   - A Software Factory Model Based on ISO9000 and CMM for Chinese Small Organizations
   - C. Li, H. Li, and M. Li

12:00 - 14:00 Lunch (at Lobby Lounge)

14:00 - 15:00 Parallel Sessions 5

Session 5A: Requirements Engineering
   - Session Chair: S.-C. Cheung
   - Requirements Management for the Incremental Development Model
   - Q. Wang and X. Lai
   - A New Tool to Analyze ER-Schemas
   - F. Boslaures and N. Kraiem

Session 5B: Usability
   - Session Chair: F.T. Chan
   - QUIM: A Framework for Quantifying Usability Metrics in Software Quality Models
   - A. Seffah, N. Kecceci, and M. Donyaye
   - Comparison of Chinese and Japanese in Designing B2C Web Pages Toward Impressional Usability
   - J. Hu, J. Zhao, K. Shima, Y. Takemura, and K.-I. Matsumoto

Session 5C: Process Improvement and Assessment
   - Session Chair: Barrie Thompson
   - Special Requirements for Software Process Improvement Applied in Teleworking Environments
   - H. Guo
   - Analysis of Interarrher Agreement in ISO/IEC 15504-Based Software Process Assessment
   - Priorities of Process Improvement Outcomes Based on Process Capability Levels
   - T. Yarkoi, M. Lepasara, and H. Jaakola

15:00 - 15:30 Tea Break

15:30 - 17:00 Parallel Sessions 6

Session 6A: Formal Verification
   - Session Chair: P.A. Strauss
   - Formally Modeling and Verifying Riccar&agravula Distributed Mutual Exclusion Algorithm
   - K. Ogata and K. Futatsumi
   - Towards a Verification of the Rule-Based Expert System of the IBM SA for OS/390 Automation Manager
   - C. Sinz, W. Kächlin, and T. Lumph
   - Towards Automatic Verification of Embedded Control Software
   - W. Bauer and R. Huwh

Session 6B: E-commerce
   - Session Chair: Lucas C.K. Hui
   - X. Wang, S.-C. Cheung, and J. Wei
   - Beyond e-commerce Software Quality: Web Services Effectiveness
   - H.-S. Chiu and C. Yang
   - A Specific Software Development Process for an Electronic Commerce Portal
   - V. Gruhn, L. Schön, and M. Böck

Session 6C: Configuration Management
   - Session Chair: S.L. Hung
   - A Software Product Model Emphasizing Relationships
   - S.C. Chou and C.W. Huang
   - Complex Systems Development Requirements — PDM and SCM Integration
   - I. Crnkovic, A. Dablivist, and D. Svensson
   - Use of Binary File Comparison Tools in Software Release Management
   - V. Fanberg

Keynote address  full paper  short paper  experience report