MONDAY OCTOBER 30

REGISTRATION 8:30–9:30 A.M.

OPENING SESSION 9:30–10:45 A.M.

Chair: Danny Tang, Kowloon-Canton Railway Corporation, Hong Kong

◆ Welcome Address from the General Chair
Danny Tang, General Manager of Information Technology, Kowloon-Canton Railway Corporation, Hong Kong
◆ Program Overview
T.H. Tse and T.Y. Chen, Program Co-Chairs
◆ Keynote Address I
K.H. Lau, Director of Information Technology Services, Government of the Hong Kong Special Administrative Region

COFFEE BREAK 10:45–11:15 A.M.

PARALLEL SESSIONS 1
11:15 A.M.–12:30 P.M.

Session 1A: Web-Based Systems
Chair: Doug Grant, Swinburne University of Technology, Australia

◆ Object-based data flow testing of Web applications
C.-H. Liu, D.C. Kung, and P. Hsia, University of Texas at Arlington, USA;
C.-T. Hsu, Sun Microsystems, Inc., USA
◆ Object driven performance testing in Web applications
B.M. Subraya and S.V. Subrahmanya, Infosys Technologies, India

Session 1B: Distributed, Concurrent, and Real-Time Systems
Chair: Michael Lyu, Chinese University of Hong Kong, Hong Kong

◆ Control of nondeterminism in testing distributed multithreaded programs
X. Cai and J. Chen, University of Windsor, Canada
◆ An approach to analyzing dependency of concurrent programs
Z. Chen and B. Xu, Southeast University, China;
H. Yang, De Montfort University, UK;
K. Liu, Staffordshire University, UK;
Janping Zhang, Utah State University, USA
◆ Modelling and verification of a network player system with DCValid
J. Wang and Q. Xu, United Nations University International Institute for Software Technology, Macau;
H. Ma, Beijing University of Posts and Telecommunication, China

LUNCH 12:30–2:00 P.M.
Session 3B: Software Testing II

Chair: Wei-Tek Tsai, Arizona State University and University of Minnesota, USA, and Amrit Goel, Syracuse University, USA

- BS 7925-2: the software component testing standard
  S.C. Reid, Cranfield University, UK
- On the completeness of test cases for atomic arithmetic expressions
  T.H. Tse, The University of Hong Kong, Hong Kong; T.Y. Chen, Swinburne University of Technology, Australia; X. Feng, The University of Hong Kong, Hong Kong
- Testing for imperfect integration of legacy software components
  D. Flater, National Institute of Standards and Technology, USA

CONFERENCE BANQUET

6:30 P.M. FOR 7:30 P.M.

Peking Garden Restaurant, 3/F, Star House, Tsimshatsui, Kowloon (Tel. 2735 8211)

Tuesday October 31

Late Registration 9:15–9:30 A.M.

Plenary Session 9:30–10:30 A.M.

Chair: Ray Paul, Office of the Assistant Secretary of Defense, USA

- Keynote Address II: Achieving quality software development for distributed environments
  Stephen S. Yau, Arizona State University, USA

Coffee Break 10:30–11:00 A.M.

Parallel Sessions 4

11:00 A.M. – 12:15 P.M.

Session 4A: Software Quality Assurance

Chair: John Jenkins, Middlesex University, United Kingdom

- How to teach practical software quality assurance: an experience report
  J.B. Thompson and H.M. Edwards, University of Sunderland, UK
- The 9 quadrant model for code reviews
  R.P. Nandivada, S. Dutta, A. Chandra, and G. Keeni, Tata Consultancy Services, India
- Investigating the effect of a second software inspection cycle: cost-benefit data from a large-scale experiment on reinspection of a software requirements document
  S. Biffl, M. Halling, and M. Kohle, Technische Universität Wien, Austria

Session 4B: Formal Methods

Chair: Hans-Dieter Ehrich, Technische Universität Braunschweig, Germany

- Formal modelling of interactive systems
  D. Goldson, Massey University Albany Campus, New Zealand
- Refinement and modular verification with observers
  A. Mercerón, University of Sydney, Australia; G.M. Pinna, Università di Siena, Italy

- TDL: a language for transition diagrams in the derivation of LOTOS specifications
  Y. Sun, The Queen’s University of Belfast, UK
  A. Dix, Staffordshire University, UK

Lunch 12:30–2:00 P.M.

Parallel Sessions 5 2:00–3:15 P.M.

Session 5A: Industrial Experience

Chair: Barrie Thompson, University of Sunderland, United Kingdom

- Software acquisition management experience learnt in a multi discipline and multi contract project environment
  S. Wong, Mass Transit Railway Corporation, Hong Kong
- Quality improvement: the six sigma way
  M. Murugappan and G. Keeni, Tata Consultancy Services, India
- Software project measurement criteria
  I.M. Hampton and B.W.T. Quinn, Mass Transit Railway Corporation, Hong Kong

Session 5B: Test Case Generation

Chair: H.Y. Ip, Vocational Training Council, Hong Kong

- Specification analysis and test data generation by solving Boolean combinations of numeric constraints
  Jian Zhang, Chinese Academy of Sciences, China
- White on black: a white-box-oriented approach for selecting black-box-generated test cases
  T.Y. Chen, Swinburne University of Technology, Australia; P.L. Poon, The Hong Kong Polytechnic University, Hong Kong; S.F. Tang, The University of Hong Kong, Hong Kong; Y.T. Yu, City University of Hong Kong, Hong Kong
- Towards a more efficient way of generating test cases: class graphs
  K.R.P.H. Leung, Hong Kong Institute of Vocational Education, Hong Kong; W. Wong, Hong Kong Baptist University, Hong Kong

Coffee Break 3:15–3:45 A.M.

Parallel Sessions 6 3:45–4:35 P.M.

Session 6A: Prototyping

Chair: Kouichi Kishida, Software Research Associates, Japan

- A model and prototype tool to manage software risks
  A.A. Keshlaf, Industrial Research Center, Tripoli, Libya; K. Hashim, Universiti Tun Abdul Razak, Kuala Lumpur, Malaysia
- Abductive approach to prototyping data flow diagrams
  E.T.H. Fang, City University of Hong Kong, Hong Kong

Session 6B: Electronic Commerce

Chair: Y.T. Yu, City University of Hong Kong, Hong Kong

- E-business testing: user perceptions and performance issues
  A. Rudolf and R. Pirker, IBM Global Services, Vienna, Austria
- A reference infrastructure for electronic commerce
  Y. Li, W. Li, and H.B.K. Tan, Nanyang Technological University, Singapore