More Attractions in Hong Kong

Victoria Peak - Look out over Hong Kong and Kowloon from the Peak. Accessible by Star Ferry and then the Peak Tram from Central.

Stanley Market - Marketplace on the south side of Hong Kong Island, which is great for buying souvenirs. Accessible by MTR (1 stop) and then by bus from Admiralty.

Floating Restaurants - Dine on a huge floating restaurant in Aberdeen. Accessible by MTR (1 stop) and then by bus from Admiralty.

Ocean Park - Amusement park located on the south side of the island housing one of the world's largest reef aquariums, and plenty of roller coasters. Accessible by MTR (1 stop) and then by direct bus from Admiralty.

Po Lin Monastery and the Big Buddha - A large golden bronze Buddha, weighing 250 tonnes, sitting 34 metres high. Accessible by Star Ferry or MTR (2 stops) to Po Lin, then by boat to Lantau from the Outlying Islands ferry pier at Central.

Science Museum and Space Museum - Located in Tsim Sha Tsui and a 5-minute walk from the hotel.

Cultural Centre - Holds operas and other cultural performances as well as exhibitions. Next to the Star Ferry and a mere 5-minute walk from the hotel.

Temple Street - Hong Kong's most famous open-air market opens at 2:00pm but really comes to life at dusk, with a bustling array of stalls selling everything from watches and leatherware to clothing and souvenirs. Attractions include fortune-tellers and Cantonese opera singers. In Yau Ma Tei. Accessible by MTR (2 stops).

Lan Kwai Fong and SoHo - Eating and drinking hot-spot on Hong Kong Island. Accessible either by Star Ferry or MTR (2 stops) to Wanchai.


COMPSAC is the major international forum for researchers, practitioners, managers, and policy makers interested in computer software and applications. The program includes keynote addresses, research papers, industrial case studies, panel discussions, and fast abstracts. It also includes three workshops on emerging important topics. The theme for this conference is "DEVELOPING TRUSTWORTHY SOFTWARE SYSTEMS".

Program At-a-Glance

**Tuesday, September 28**
- 09:00-10:00 Opening Session
- 10:00-10:30 Coffee Break
- 10:30-12:00 Parallel Sessions: 1 Component-based Software (1)
- 13:30-15:00 Parallel Sessions: 5 Formal Methods (1)
- 15:30-15:30 Coffee Break
- 15:30-16:30 Parallel Sessions: 9 Software Reliability
- 16:00-17:00 Parallel Sessions: 6 Middleware
- 17:00-18:00 Parallel Sessions: 7 Real-Time Systems

**Wednesday, September 29**
- 09:00-10:00 Plenary Session (1)
- 10:00-10:30 Coffee Break
- 10:30-12:00 Parallel Sessions: 2 Component-based Software (2)
- 13:30-15:00 Parallel Sessions: 10 Security (1)
- 15:30-15:30 Coffee Break
- 15:30-16:30 Parallel Sessions: 11 Panel: Research Directions
- 16:00-18:00 Panel: Research Directions

**Thursday, September 30**
- 09:00-10:00 Plenary Session (2)
- 10:00-10:30 Coffee Break
- 10:30-12:00 Parallel Sessions: 12 Component-based Software (3)
- 13:30-15:00 Parallel Sessions: 11 Panel: Research Directions
- 15:30-15:30 Coffee Break
- 15:30-16:30 Parallel Sessions: 11 Panel: Research Directions
- 16:00-18:00 Panel: Research Directions

**Friday, October 1**
- 09:00-10:00 Plenary Session (3)
- 10:00-10:30 Coffee Break
- 10:30-12:00 Parallel Sessions: 13 Process Management (2)
- 13:30-15:00 Parallel Sessions: 3 Software Testing (1)
- 15:30-15:30 Coffee Break
- 15:30-16:30 Parallel Sessions: 14 Software Testing (3)
- 16:00-18:00 Panel: Security, Quality Assurance and Testing of Web-based Applications (2)

**Saturday, October 2**
- 09:00-10:00 Parallel Sessions: 2 Component-based Software (4)
- 10:00-10:30 Coffee Break
- 10:30-12:00 Parallel Sessions: 15 Panel: Computer Supported Cooperative Work in Software Engineering
- 13:30-15:00 Parallel Sessions: 16 Formal Methods (3)
- 15:30-15:30 Coffee Break
- 15:30-16:30 Parallel Sessions: 17 Software Architecture
- 16:00-18:00 Panel: Security, Quality Assurance and Testing of Web-based Applications (3)

**Sunday, October 3**
- 09:00-10:00 Parallel Sessions: 18 Security (3)
- 10:00-10:30 Coffee Break
- 10:30-12:00 Parallel Sessions: 19 Panel: Security, Quality Assurance and Testing of Web-based Applications (4)
- 13:30-15:00 Parallel Sessions: 20 Requirements and Design
- 15:30-15:30 Coffee Break
- 15:30-16:30 Parallel Sessions: 21 Pervasive/Ubiquitous Computing
- 16:00-18:00 Panel: Security, Quality Assurance and Testing of Web-based Applications (5)

**Conference Reception**
- Date: September 28, 2004
- Venue: Asia World Expo, Hong Kong

**Conference Banquet**
- Date: September 28, 2004
- Venue: Garden Restaurant at Star House
COMPSAC is a major international forum for researchers, practitioners, managers, and policy makers interested in computer software and applications. It was first held in Chicago in 1977, and since then it has been one of the major forums for academia, industry, and government to discuss the state of art, new advances, and future trends in software technologies and practices.

This is the first time that COMPSAC is held in Hong Kong, China. This year’s COMPSAC has a very strong technical program, which includes 3 keynotes addresses, 5 panel sessions, 20 regular paper sessions, 4 fast abstract sessions and 3 workshops.

Acknowledgement

The conference committee would like to express our appreciation to the Croucher Foundation for partially sponsoring the registration fees of authors and panelists from Hong Kong and mainland China.

Hong Kong: A Dynamic City

Experience the distinctive blend of East and West in this dynamic world-class city. Feel the rush as you indulge in shopping. Savour culinary delicacies and taste the variety of cuisine that is not easily found elsewhere in the world. Open your senses to Hong Kong’s amazing skyline, bustling harbour and peaceful countryside. Come discover the diversity and sophistication that is Hong Kong. You’ll certainly love it!

Great Weather, Spectacular Show: A Symphony of Lights

The weather of Hong Kong is great in late September to early October. Every night at 8 pm, the waterfront of the fabulous Victoria Harbour is transformed into a stage of lights and music. While enjoying the free spectacular world-class show watching skyscrapers glow in a myriad of colours, spectators may feel the waft of warm late summer breezes along with the experience of a romantic symphony of lights.

September 28, 2004: The Mid-Autumn Festival

The first day of the conference, September 28, coincides with a most charming and picturesque of Hong Kong’s traditional festival, the Mid-Autumn Festival. Joining thousands of families to gather at parks, hills and beaches at night and surrounding oneself with candles and glowing lanterns would certainly be a memorable experience. Special lantern display will begin at 6:30 pm near the Land Mark and Bird Lake in Kowloon Park, only a few minutes’ walk from the conference venue.

October 1, 2004: The Chinese National Day

The day after the conference, October 1, is the Chinese National Day. To celebrate the day, beautiful fireworks will light up the night sky over the Victoria Harbour at 8 pm. The best viewing spot is along the Avenue of Stars on the Tsim Sha Tsiu waterfront promenade near the Hong Kong Cultural Centre, only 5-minutes’ walk from the conference venue.

Gourmet Paradise

Hong Kong’s cuisine is renowned for its exotic fusion of Eastern and Western flavours along with a wide variety of culinary delights. Its cultural blend, proximity to mainland China and reputation for quality have made Hong Kong the world’s undisputed Gourmet Paradise. Discover the veritable smorgasbord of cuisine in the World of Dining from every Asian delicacy to the very best Western fare.

Touring Around in Hong Kong

There are harbour tours, tours to the outlying islands; fascinating culture & heritage tours. Explore the green side of Hong Kong with a hiking tour or a tour of Sai Kung, the “Back Garden”. Join a unique tour to enjoy birdwatching or a kayaking trip for a distinctive experience!

Gateway to China

Do not miss the opportunity to visit some of the neighbouring Chinese cities that are sure to impress. Take advantage of Hong Kong’s ties and transportation to mainland China, Macau and the Pearl River Delta to explore the cities, culture and countryside of one of the most fascinating destinations on Hong Kong’s doorstep.

An open planning meeting of COMPSAC 2005 will be held in Crystal Ballroom A at COMPSAC 2004 conference hotel from 3:30 – 5:00 p.m. on Tuesday, September 28, 2004. All are welcome.

The requirements for submissions for regular papers, workshop and panel proposals are the same as COMPSAC 2004. Detailed call-for-contributions announcement will be posted to the COMPSAC 2005 website http://aquila.nvc.cs.vt.edu/compsac2005 by mid-October, 2004.

Program Co-Chairs

Irving Ray Chen
Virginia Tech
Peking University
University of Edinburgh
USA
China
UK
Ingrid R. Bittner
Hong Mei
Roland N. Bittner
Peking University
University of Edinburgh
USA
China

Steering Committee Chair

Stephen S. Yau
Arizona State University
USA

Session 30: WORKSHOP on QUALITY ASSURANCE AND TESTING OF WEB-BASED APPLICATIONS (1) (Crystal Room 1)
Chair: Dave Kong
University of Texas at Arlington, USA
Web Application Bypass Testing: Jeff Offutt, Ye Wu, Xiaodan Du, and Hong Huang, Georgia Mason University, USA
Cooperative Agent Approach to Quality Assurance and Testing Web Software: Hong Zh, Oxford Brooks University, UK
Data Flow Analysis and Testing of Java Server Pages: Chien-Hung Liu, National Taiwan University of Technology, Taiwan
Web-FIT: A Tool for Dependency Analysis of Web Services: Nik Leoker, Malcolm Mann, University of Durham, UK, and Je Xu, University of Leeds, UK

Session 31: FAST ABSTRACT (3) – SECURITY, INFORMATION RETRIEVAL AND AGENT-BASED SOFTWARE (Crystal Room 3)
Chair: Jeff Lei
University of Texas at Arlington, USA
Towards an Authentication Middleware to Support Ubiquitous Web Access: N. Zhang, J. Chin, A. Ractus, and C. Goble, The University of Manchester, UK
N-gram-based Detection of New Malicious Code: Tony Abou-Assaad, Nick Cercone, Vladek Kosev, and Ray Swedlow, Dalhousie University, Canada
A Decision-making Model for Intelligent Agent with Internal State: Shantu Hu and Baiyan Wu, Fudan University, China
Goal Autonomous Agent Architecture: Z. Shen, R. Gay, Y. Miao, and C. Miao, Nanyang Technological University, Singapore
An Intelligent Component Retrieval System Using Conversational CBR: Mingrang Gu and Xun Yong, Norwegian University of Science and Technology, Norway
Excalibur: A Personalized Meta Search Engine: Loo Yuan, Matthew Chong, Ying Kit Lai, and Chung Keong Poon, City University of Hong Kong, Hong Kong
Rich Media Retrieval in an Object XML Framework: a Case Study with Flash Movies using Structural Join Index Hierarchy: Hong Chao-Mak Edmund, The Hong Kong Institute of Education, Hong Kong, Chi-wei Fang, Hong Kong Institute of Vocational Education (Tuen Mun), Hong Kong, and Qin Li, City University of Hong Kong, Hong Kong

Session 32: WORKSHOP on GEOGRAPHIC AND BIOLOGICAL DATA MANAGEMENT (2) (Crystal Ballroom A)
Chair: Roger Zimmermann
University of Southern California, USA
On the Compleats of Finding Emerging Patterns: L. Wang, H. Zhao, G. Dong, and J. Li, City University of Hong Kong, Hong Kong
Web Service and Geographical Information Integration: Yinjie Luo, Xingqiang Liu, Wenjun Wu, Xiaolin Wang, and Zhiqiang Xu, Peking University, China
A Method Based on Improved Bayesian Inference Network Model and Hidden Markov Model for Prediction of Protein Secondary Structure: Guangyi Yang, Chunguang Zhou, Chengquan Hu, Zhebei Yu, and Hongyi Yang, Jinlin University, China
Spanishcomsoltelos for Modeler Environment Data: Kristin Eickhorst, Anne Croiss, Peggy Agouris, and Tony Stefanidis, University of Maine, USA
Mining Complex Relationships in the SDSS SkyServer Spatial Database: Bavanu Amaan, Sanjay Chow, Prii Sun, and Robert Mann, University of Sydney, Australia
Mining Dynamic Interdomain Association Rules for Local-scale Weather Prediction: Zhangqun Zhang, Wei-Wei Wu, and Yuechen Huang, The University of Texas at Dallas, USA

Session 33: WORKSHOP on SOFTWARE CYBERNETICS (2) (Crystal Room 2)
Chair: Kai-Yuan Cai
Beijing University of Aeronautics and Astronautics, China
Linking Software Process Modeling with Markov Decision Theory: Frank Padberg, Universität Karlsruhe, Germany
Modeling and Controlling the Incremental Software Test Process: Scott D Miller, Raymond A. DeCarlo, and Aditya P. Mathur, Purdue University, USA
Software Test Process Control: Status and Future Directions: Ghaffari Abu, Leencky Chee, and Jow W. Cangasse, The University of Texas at Dallas, USA

Session 34: WORKSHOP on QUALITY ASSURANCE AND TESTING OF WEB-BASED APPLICATIONS (2) (Crystal Room 1)
Chair: Hong Zh, Oxford Brooks University, UK
Online Testing of Web-Based Applications: Qianxiang Wang, Lining Quan, and Fuchen Ying, Peking University, China
Application of Group Testing in Verification of Dynamic Composite Web Services: W. T. Tai, Y. Chen, Arizona State University, USA, R. Paul, Department of Defence, USA, N. Liao, and H. Huang, Arizona State University, USA
Agent-Based Framework for Testing Web Applications: David Kang, The University of Texas at Arlington, USA
Code-Coverage Guided Prioritized Test Generation: J. Li, and H. Yee, Aoyabu Labs Research, USA

Session 35: FAST ABSTRACT (4) – SOFTWARE APPLICATIONS (Crystal Room 3)
Chair: Buwenn Xu, Southeast University, China
A New e-Shopping System Using High Performance Custom Computers: Xuejia Zhang, Y. Sun, P. Wang, and X. Chen, The University of Sydney, Australia
Development of a Hybrid Automotive Wireless Harver: Kumi Akinghini and Nilesd Patel, University of Michigan-Dearborn, USA
Lessons Learned from the Practice of Mobile Health Application Development: Ping Yu, The University of Wollongong, Australia, and Hu Yu, Chongqing Institute of Technology, China
Compressing an Iterated Form with LCS: Fang-Yie Leu and Yao-Chung Fan, Nanyang Technological University, Singapore
An Imprecise Computation Model in Reducing Power Consumption of Flash Memory for Portable Devices: Li-Ping Tung, Jia-Ming Chen, Wei-Fen Hsu, and Wei-Kuan Shih, National Tsing Hua University, Taiwan

Do not miss COMPSAC 2005!!

Edinburgh, UK, July 25-28, 2005
The conference will be held at the University of Edinburgh in Edinburgh, UK. The program will consist of invited keynote addresses, regular papers, panel sessions, workshops and fast abstracts, like COMPSAC 2004.

An open planning meeting of COMPSAC 2005 will be held in Crystal Ballroom A at COMPSAC 2004 conference hotel from 3:30 – 5:00 p.m. on Tuesday, September 28, 2004. All are welcome.

The requirements for submissions for regular papers, workshop and panel proposals are the same as COMPSAC 2004. Detailed call-for-contributions announcement will be posted to the COMPSAC 2005 website http://aquila.nvc.cs.vt.edu/compsac2005 by mid-October, 2004.

Important Dates

November 17, 2004: Deadline for workshop and panel proposals
December 5, 2004: Notification on encouragement on developing proposed workshops or panels.
February 1, 2005: Deadline for regular and workshop paper submissions
April 1, 2005: Notification for authors of regular and workshop papers
May 1, 2005: Deadline for camera-ready copies of accepted regular and workshop papers, workshop organizers’ remarks, panel organizers’ scope statements, and panelists’ position papers
Wednesday September 29, 2004
9:00-10:00 Plenary Session (1) (Crystal Ballroom B & C)

Session 9: SOFTWARE RELIABILITY
(Crystal Room 2)

Chair: Fevr Belli, University of Paderborn, Germany

• Application of Maximum Entropy Principal to Software Failure Prediction: Shu Wu, Haoyun Yang, Xiao-tao Jia, Chang Liu, Chen Liu, and Maozhong Jin, Beihang University, China

• Software Reliability Growth Models Incorporating Fault Dependency with Various Debugging Time Lags: Chen-Yu Huang, Chao-Tin Lin, National Tsing Hua University, Taiwan, Sy-Yen Kuo, National Taiwan University, Taiwan, Michael B. Lysy, and C.C. Ste, The Chinese University of Hong Kong, Hong Kong

• The Effects of Fault Counting Methods on Fault Finding: Allen P. Nikora, California Institute of Technology, USA, and John C. Musson, Cylant, Inc., USA

• Portable Faultloads Based on Revised Faults for DBMS Dependability Benchmarking: Marco Vicita, Politecnico di Milano, Milano, Italy, and Henrique Medrano, University of Hong Kong, Hong Kong

Session 10: SECURITY (1)
(Crystal Room 3)

Chair: Maarten Bouwen, University of Amsterdam, The Netherlands

• A Multi-Class SLIPPER System for Intrusion Detection: Zhenyu Yu and Jeffery Tao, University of Illinois at Chicago, USA

• A Mobile Agent System Model based on Extended Elementary Object System: Lu Ma, Jeffrey Tao, and Tad Mabooka, University of Illinois at Chicago, USA

• A Secure and Fully Private Borda Voting protocol with Universal Verifiability: Changjie Wang and Hui-fang Leung, The Chinese University of Hong Kong, Hong Kong

• Enhanced Security Models for Operating Systems: A Cryptographic Approach: Christian Payne, Murdoch University, Australia

Session 11: PANEL: RESEARCH DIRECTIONS IN SOFTWARE PROCESS IMPROVEMENT
(Crystal Room 4)

Moderator: William Chu, TsingHai University, Taiwan

Panels: Dave Card, Software Productivity Consortium, USA
K. P. Chow, The University of Hong Kong, Hong Kong
Pankaj Jaitke, Indian Institute of Technology and Micoorit, India
Miguel Serrano, Centro de Investigaciones en Matematica, Mexico

Session 12: COMPONENT-BASED SOFTWARE (2)
(Crystal Room 2)

Chair: Carl Ch, Iowa State University, USA

• Intelligent Component Selection: Valerie Mercuelle, Edith Cowan University, Australia, Joostel Amarasuriya, Murdoch University, Australia, and Chong Peng Lam, Edith Cowan University, Australia

• Component-wise Mapping of Media-Needs to a Distributed Presentation Environment: Luis Feito and Jun Hu, Eindhoven University of Technology, The Netherlands

• Component Failure Mitigation According to Failure Type: Fan Ye and Tim Kelly, University of York, UK

• Modular Design of Reactive Systems: Cristina Cerchi Sellelou and Tiberiu Sellelou, Turku Centre for Computer Science, Finland

Session 13: PROCESS MANAGEMENT (2)
(Crystal Room 3)

Chair: F. T. Chan, The University of Hong Kong, Hong Kong

• Software Effect Prediction Models Using Maximum Likelihood Methods Require Univariate Normality of the Software Metrics Data Sample: Can Such a Sample Be Made Multivariate Normal? - Victor K.Y. Chan, City University of Hong Kong and InfoTech Services (Hong Kong) Limited, Hong Kong

• POP beyond SOOA: Reaching the New Horizon of Service Cooperation: S. Liu, D. Ye, J. Wei, G. Xu, X. Yuan, and Y. Liu, The Chinese Academy of Sciences, China

• FC method: A Practical Approach to Improve Quality and Efficiency of Software Processes for Embedded System Revision: Karama Azaren, Handshike Kayou, and Kenji Kaijou, Shinshu University, Japan

• A Complete Textual Merging Algorithm for Software Configuration Management Systems: Haifeng Shen, Nanyang Technological University, Singapore, and Chengzheng Sun, Griffiths University, Australia

Session 14: SOFTWARE TESTING (2)
(Crystal Room A)

Chair: T. Y. Chen, Swinburne University of Technology, Australia

• Test Criteria for Context-Free Grammars: Hu Li, Miaozhong Jin, Chao Liu, and Zhenqi Guo, Beihang University, China

• Mutation-Based Testing Criteria for Timeliness: Eric Y. K. Chan, City University of Hong Kong, Hong Kong, P-S.P. Porn, The Hong Kong Polytechnic University, Hong Kong, and Y. T. Yu, City University of Hong Kong, Hong Kong

Session 15: PANEL: COMPUTER SUPPORTED COOPERATIVE WORK IN SOFTWARE ENGINEERING
(Crystal Room 1)

Moderator: Jenny Li, Araya Research Labs, USA

Panels: Stephen Chen, Motorola, USA
Karama Kanoun, LAAS-CNRS, France
Tangja Li, Xiyou University of China
Zongjia Liu, The Chinese Academy of Sciences, China
Aditya Mathur, Purdue University, USA

12:00-13:30 Lunch Break (Crystal Ballroom B & C)