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**Bronze Sponsors in China**

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IEEE COMPSAC 2007 Program Summary

This year we received 325 submissions internationally from academia, government and industrial sectors. Each paper was reviewed by at least three reviewers to evaluate its technical content and suitability to the conference theme. After a rigorous peer review process, 59 regular papers and 35 short papers have been selected for presentation and included in the conference proceedings. The regular papers include mature results. Short papers represent quality work that will spur discussion. The program contains fast abstract sessions to discuss promising but preliminary results and a doctoral symposium to present work-in-progress.

The program includes:

- 3 Keynotes and 7 Panel Sections
- 25 Research and Industry Sections (6 Tracks)
- 2 Doctoral Symposium Sections and 2 Fast Abstracts Sections
- 2 Tutorials
- 1 Banquet and 1 Reception
- 14 Workshops (Total: 41 Workshop Sections)
  - The First IEEE International Workshop on Testing Emerging Software Technology (TEST07)
  - The Second IEEE International Workshop on Security, Trust, and Privacy for Software Applications (STPSA07)
  - The First IEEE International Workshop on Engineering Mobile-Based Software and Applications (EMOBS07)
  - The Second IEEE International Workshop on Engineering Semantic Agent Systems (ESAS07)
  - The Fourth IEEE International Workshop on Software Cybernetics (IWSC07)
  - The First IEEE International Workshop on Software Engineering Challenges in the Automotive Domain (SECAD07)
  - The First IEEE International Workshop on Quality Oriented Reuse of Software (QUORS07)
  - The First IEEE International workshop on Software Engineering for Adaptive Software Systems (SEASS07)
  - The Second IEEE Asia-Pacific Workshop on Software Architectures and Component Technologies (SACT07)
  - The First IEEE International Workshop on Security in Software Engineering (IWSSE07)
  - The Third IEEE Asian Workshop on Aspect-Oriented Software Development (AOAsia07)
  - The First IEEE International Workshop on Development and Application of Knowledge Based Software Engineering Tool (KASET07)
  - The First IEEE International Workshop on Requirements Engineering for Services (REFS07)
  - The First IEEE International Workshop on Software Patterns: Addressing Challenges (SPAC07)
### COMPSAC 2007 Program At-a-Glance

#### Monday, July 23, 2007: Workshops (Monday Tutorials are Cancelled)

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<td>AOAsia 1</td>
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<td>SACT 2</td>
<td>EMOBS 2</td>
<td>ESAS 2</td>
<td>IWSC 2</td>
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<td>EMOBS 3,4,5</td>
<td>ESAS 3</td>
<td>IWSC 3,4</td>
<td>AOAsia 3,4</td>
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**Tuesday, July 24, 2007: The First Conference Day**

**Welcome:** Carl Chang, Anson Chen, Huimin Lin (RB-1/2)

**Program Overview:** Bruce McMillin, Fevzi Belli, Hong Mei

**Opening Remark:** IEEE Computer Society 2007 President Michael Williams

#### Keynote 1:
Software Foundation for Critical Pervasive Computing, Sumi Helal; Chaired by: Bruce McMillin

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<tr>
<td>10:00-11:30</td>
<td>T1: Security 1</td>
<td>T2: Life Cycle 1</td>
<td>T3: QoS 1</td>
<td>Panel 1</td>
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<tr>
<td>15:30-17:00</td>
<td>T7: Security 3</td>
<td>T8: Life Cycle 3</td>
<td>T9: QoS 3</td>
<td>Panel 3</td>
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<tr>
<td>18:30-22:00</td>
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<td></td>
<td>COMPSAC 2007 Reception (The Central Garden Of The Friendship Hotel)</td>
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#### Wednesday, July 25, 2007: The Second Conference Day

**Best Paper Awards:** Bruce McMillin (RB-1/2)

#### Keynote 2:
From Knowledge-based Software Engineering to Knowware-based Software Engineering, Ruqian Lu; Chaired by: Hong Mei

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<td>AM Break</td>
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<tr>
<td>10:00-11:30</td>
<td>W1: Security 4</td>
<td>W2: Requirements 1</td>
<td>W3: Quality 1</td>
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<td>11:30-13:30</td>
<td>Lunch (Friendship Palace)</td>
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<tr>
<td>13:30-15:00</td>
<td>Doctoral Symposium 1</td>
<td>W5: Requirements 2</td>
<td>W6: Quality 2</td>
<td>W4: Life Cycle 4</td>
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<tr>
<td>15:00-15:30</td>
<td>PM Break</td>
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<tr>
<td>15:30-17:00</td>
<td>Doctoral Symposium 2</td>
<td>W7: Requirement 3</td>
<td>W8: Quality 3</td>
<td>Panel 4</td>
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<tr>
<td>18:30-22:00</td>
<td>COMPSAC 2007 Banquet (The People's Great Hall. Bus Transportation Will Be Provided)</td>
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#### Thursday, July 26, 2007: The Third Conference Day

**Plenary Panel 5:** Future Trends – Computing as a Core Discipline (RB-1/2)

Chair: Bruce McMillin

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<td>AM Break</td>
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<td>10:00-11:30</td>
<td>Fast Abstracts 1</td>
<td>Birds of a Feather</td>
<td>H2: Quality 4</td>
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<tr>
<td>13:30-15:00</td>
<td>Fast Abstracts 2</td>
<td>H1: Requirements 4</td>
<td>H4: Quality 5</td>
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<td>15:15-16:45</td>
<td>Panel 6</td>
<td>H3: Requirements 5</td>
<td>H5: Quality 6</td>
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**COMPSAC 2008 Planning Meeting (JB-1) All Are Invited!**

**Friday, July 27, 2007: Tutorials, Workshops and Industry Day**

**Industry Day Plenary Panel 7:** Software for the Mobile Internet (Meeting Hall 1)

#### Keynote 3:
Software for the Mobile Internet, Anson Chen; Chaired by: Stephen Chen

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<td>IWSE 1</td>
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<tr>
<td>13:30-15:00</td>
<td>Tutorial 2</td>
<td>SPAC 2</td>
<td>Industrial 2</td>
<td>KASET 2</td>
<td>IWSE 2</td>
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<td>15:00-16:00</td>
<td>PM Break (One Hour)</td>
<td>(NOTE: Tutorial 2 Time: 14:00-16:30)</td>
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<td>KASET3,4</td>
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Have A Safe Trip Back Home! / Or Tour to The Great Wall on July 28!
COMPSAC 2007 Program

Tuesday, July 24, 2007

8:00-9:30 Opening Session and Keynote 1 (Room: RB-1/2)
Conference Welcome: Carl Chang, Anson Chen, and Huimin Lin
Program Overview: Bruce McMillin, Fevzi Belli, and Hong Mei
Opening Remark: Michael Williams, 2007 President, IEEE Computer Society
Keynote: Software Foundation for Critical Pervasive Computing, Sumi Helal, University of Florida, USA
Chaired by: Bruce McMillin, USA

9:30-10:00 AM Break

10:00-11:30 Parallel Sessions

Session T1: Security 1 - Security in Communication (Room: RB-4)
Chair: Kai-Yuan Cai, China
• IAPF: A Framework for Enhancing Web Services Security: Navya Sidharth, Jigang Liu
• A Scalable Service Scheme for Secure Group Communication in Grid: Yunfa Li, Hai Jin, Deqing Zou, Jieyun Chen
• An End-to-end Detection of Wormhole Attack in Wireless Ad-hoc Networks: Xia Wang, Johnny Wong

Session T2: Life Cycle 1 - Internet and Web-Based Systems (Room: RB-5)
Chair: Simanta Mitra, USA
• A Satisfaction Driven Model for the Composition of Interactive Web Services: Shuchao Wan, Wei Jun, Jingyu Song, Hua Zhong
• Knowledge Hiding in Data Mining by Transaction Adding and Removing: Xiaoming Zhang
• Performance Evaluation of Notifications in a Web Services and P2P-Based Network Management Overlay: Clarissa Cassales Marquezan, Carlos Raniery Paula dos Santo, Ewerton Monteiro Salvador, Maria Janilce Bosquirol Almeida, Sérgio Luis Cechin, Lisandro Zambenedetti Granville

Session T3: QoS 1 - Quality of Service and Performance (Room: JB-2)
Chair: Sheikh Ahamed, USA
• Performance Prediction of Service-Oriented Applications based on an Enterprise Service Bus: Yan Liu, Ian Gorton, Liming Zhu
• An Online Monitoring Approach for Web Services: Qianxiang Wang, Yonngang Liu, Min Li, Hong Mei
• SQS: A Secure and QoS Guaranteed Solution for Mobile Service: Chao Tong, Xiaopeng Gao, Wei Chen, Xiang Long

Panel 1: Challenges and Experiences in Industry-University Research Collaboration and Technology Transition (Room: JB-3)
Chair: David Card, Norway/USA
Panelists: Soo-Yang Park, Korea; William Cheng-Chung Chu, Tunghai University, Taiwan; Eric Wong, University of Texas-Dallas, USA

11:30 – 13:30 Lunch

13:30-15:00 Parallel Sessions

Session T4: Security 2 - Modeling Security (Room: RB-4)
Chair: Ville Leppanen, Finland
• An Omnipresent Formal Trust Model (FTM) for Pervasive Computing Environment: Munirul Haque, Sheikh Ahamed
• An Authentication based Lightweight Device Transaction Adding and Removing: Sheikh Ahamed, Munirul Haque, Haifeng Li, KM Asif
• Defining and Detecting Bad Smells of Aspect-Oriented Software: Komsan Srivisut, Pornsiri Muenchaisri (Short)

Session T5: Life Cycle 2 - Component-Based Software and Architecture (Room: RB-5)
Chair: Qianxiang Wang, China
• Iterative Planning in the Context of Automated Code Synthesis: Jicheng Fu, Farokh Bastani, I-Ling Yen
• Automating Dynamic Reconfiguration for Non-Stop Dataflow Systems: Wei Li, Zhikun Zhao
• An Architectural Framework for the Design and Analysis of Autonomous Adaptive Systems: Kendra Cooper, Joao Cangussu, Eric Wong

Session T6: QoS 2 - Quality of Service and Service Composition (Room: JB-2)
Chair: Hongji Yang, UK
• An Interaction Instance Oriented Approach for Web Application Integration in Portals: Jingyu Song, Jun Wei, Shuchao Wan, Hua Zhong
• QoS-aware Service Composition based on Tree-Coded Genetic Algorithm: Chunming Gao, Meiling Cai, Huowang Chen
• Dynamic Reconfigurable Testing of Service-Oriented Architecture: Xiaoqing Bai, Dezheng Xu, Guilan Dai, Wei-Tek Tsai, Yinong Chen

Panel 2: Middleware for Next-Generation Converged Networks and Services: Myths or Reality? (Room: JB-3)
Chair: Paolo Bellavista, University of Bologna, Italy
Panelists: Sheikh I. Ahamed, Marquette University, USA; Matthias Book, University of Leipzig, Germany; Stephen Chen, Motorola, USA; George Kormentzas, University of the Aegean, Greece; Weishan Zhang, Tongji University, Shanghai, China

15:00-15:30 PM Break

15:30-17:00 Parallel Sessions

Session T7: Security 3 - Vulnerabilities – Detecting and Assessment (Room: RB-4)
Chair: Mohammad Zulkernine, Canada
Session T8: Life Cycle 3 - Embedded Systems (Room: RB-5)
Chair: Tiberiu Seceleanu, Finland
• Flexible Application Software Generation for Heterogeneous Multi-Processor System-on-Chip: Xavier Guerin, Katalin Popovici, Wassim Youssef, Frederic Rousseau, Ahmed Jerraya
• Concurrency Control Modularization with Aspect-Oriented Programming: Sergio Castelo Branco Soares, Paulo Henrique Monteiro Borba, Ricardo Massa Ferreira Lima

Session T9: QoS 3 - Modeling and Validation for Quality of Service (Room: JB-2)
Chair: I.C. Wu, China
• Validity Checking on Grid Service Composition: Jing Zhou, Guosun Zeng (Short)
• A Fast Replica Selection Algorithm for Data Grid: Dafei Yin, Bin Chen, Zhou Huang, Yu Fang (Short)
• Improving the Accuracy of UML Class Model Recovery: Kun Wang, Wuwei Shen (Short)
• Connectors conveying Software Architecture Evolution: Dalila Tamzalit, Nassima Sadou, Mourad Oussalah (Short)

Panel 3: Ethics in Computing (Room: JB-3)
Chair: Sahra Sedigh, USA
Panelists: Atilla Elçi, Eastern Mediterranean University, Turkey; Ioannis Athanasiadis, Istituto Dalle Molle di Studi sull'Intelligenza Artificiale, Switzerland; Eric Yu, University of Toronto, Canada.

18:30-22:00 IEEE Computer Society Presidential Welcome Reception (The Central Garden of the Friendship Hotel)

Wednesday, July 25, 2007

8:00-9:30 Best Paper Awards and Keynote 2 (Room: RB-1/2)
Best Paper Awards: Bruce McMillin
Keynote: From Knowledge-based Software Engineering to Knowware-based Software Engineering. Ruqian Lu, Chinese Academy of Sciences, China
Chaired by: Hong Mei, China

9:30-10:00 AM Break

10:00-11:30 Parallel Sessions

Session W1: Security 4 - Infrastructure, Networking and Security (Room: RB-4)
Chair: Atilla Elçi, Turkey
• A Model-driven Framework for Representing and Applying Design Patterns: Ghizlane El Boussaidi, Hafedh Mili (Short)
• Infrastructure Hardening: A Competitive Coevolutionary Methodology Inspired by Neo-Darwinian Arms Races: Travis Service, Daniel Tauritz, William Siever (Short)
• Reliable Self-Clustering P2P Overlay Networks: Wang Wei, Zeng Guosun (Short)
• Software Component Re-engineering for their Runtime Structural Adaptation: Gautier Bastide, Abdelhak Seriai, Mourad Oussalah (Short)

Session W2: Requirements 1 - Design and Modeling (Room: RB-5)
Chair: Alan Davis, USA
• Structuring 2-way Branches in Binary Executables: Tao Wei, Jian Mao, Wei Zou, Yu Chen (Short)
• FLEXCMM - A Component Model for Adaptive Embedded Systems: Sindolfo Miranda Filho, Luiz Eduardo Cunha Leite, Guido Lemos, Silvio Meira
• Structuring Software Functional Requirements for Automated Design and Verification: Sukhamay Kundu

Session W3: Quality 1 - Validation and Assessment (Room: JB-2)
Chair: Ji Wang, China
• Piping Classification to Metamorphic Testing: An Empirical Study towards Better Effectiveness for the Identification of Failures in Mesh Simplification Programs: W.K. Chan, Jeffrey Ho, T.H. Tse
• Risk Assessment in Early Software Design Based on the Software Function-Failure Design Method: Jayson Vucovich, Robert Stone, Frank Liu, Irem Tumer

11:30 – 13:30 Lunch

13:30-15:00 Parallel Sessions

Session W4: Life Cycle 4 - Process and Maintenance (Room: JB-3)
Chair: Feng-Jian Wang, Taiwan
• Tracking Projects through a Three-dimensional Software Development Model: Juan Li, Nan Jiang, Mingshu Li, Qing Wang, Yanwu Yang
• Traceability Link Evolution Management with Incremental Latent Semantic Indexing: Hsin-yi Jiang, Carl K. Chang, Tien Nguyen
• Identifying Software Decompositions by Applying Transaction Clustering on Source Code: Renuka Sindhgatta, Krishnakumar Pooloth

Session W5: Requirements 2 - Putting Models to Run (Room: RB-5)
Chair: Dianxiang Xu, USA
• Understanding and Classifying Requirements for Computer-Aided Healthcare Workflows: Xiping Song, Beatrice Hwong, Gilberto Matos, Arnold Rudorfer
• Deriving Formal Specifications from Informal Requirements: Dubravka Ilic
• A Model-based Object-oriented Approach to Requirement Engineering (MORE): William C. Chu, Chih-Wei Lu, C.H. Chang, Chih-Hung Chang (Short)
• Tool Support to Implementing Business Rules in Database Applications: Liwen Lin, Suzanne M. Embury, Brian C. Warboys (Short)
Session W6: Quality 2 - Quantification (Room: JB-2)
Chair: Xiaoying Bai, China
• Architecture-based Software Reliability: Why only a few parameters matter? : Margaret Hamill, Katerina Goseva-Popstojanova
• On Identifying Bug Patterns in Aspect-Oriented Programs: Sai Zhang, Jianjun Zhao
• Measuring and Assessing Software Reliability Growth through Simulation-Based Approaches: Chu-Ti Lin, Chin-Yu Huang, Chuan-Ching Sue

15:00-15:30 PM Break

15:30-17:00 Parallel Sessions

Session W7: Requirements 3 - Event-Based and State-Based Modeling (Room: RB-5)
Chair: Frank Liu, USA
• Using UML Activity Diagrams and Event B for Distributed and Parallel Applications: Ahlem Ben Younes, Leila Jenni Ben Ayed
• Integration of Agent-Oriented Conceptual Models and UML Activity Diagrams Using Effect Annotations: Moshiru Bhuivan, Zahidul Islam, George Koliadis, Aneesh Krishna, Aditya Ghose
• A Data Mining Approach for Software State Definition: Beibei Yin, Chenggang Bai, Kaiyuan Cai

Session W8: Quality 3 - Coverage and Prioritization for Testing (Room: JB-2)
Chair: Joao W. Cangussu, USA
• Effective Fault Localization using Code Coverage: Eric Wong, Lei Zhao, Yu Qi, Kai-Yuan Cai
• A Study of Enhanced MC/DC Coverage Criterion for Software Testing:Jun-Ru Chang, Chin-Yu Huang
• Test Case Prioritization for Black Box Testing: Bo Qu, Changhai Nie, Baowen Xu, Xiaofang Zhang

Panel 4: Software Process Improvement for Small Organizations (Room: JB-3)
Chair: Doo-Hwan Bae, Korea
Panelists: David Card, DNV, Robert Chi Tau Lai, Beijing Cyber Recreation District, China; Sang-Eun Lee, Korea Information Promotion Agency, Korea; Sang-Yoon Min, Solution Link, Korea

COMPAS Banquet  (The People's Great Hall - Bus transportation will be provided)
17:15 Buses departure from the Friendship Hotel
19:00 Tour in the Peoples’ Great Hall
19:30-21:30 Banquet

Thursday, July 26, 2007

8:00-9:30 Plenary Panel 5: Future Trends – Computing as a Core Discipline (Room: RB-1/2)
Chair: Bruce McMillin, University of Missouri-Rolla, USA
Panelists: Lionel M. Ni, The Hong Kong University of Science and Technology; Sumi Helal, University of Florida, USA; E.K. Park, National Science Foundation, USA; Liang-Jie (LJ) Zhang, IBM T.J. Watson Research Center, USA

9:30-10:00 AM Break

10:30-11:30 Parallel Sessions

Session Birds-of-a-feather: Curriculum Initiative – Services Computing (Room: JB-3)
Chair: LJ Zhang, USA; Hong Cai, China

Session H2: Quality 4 – Specification and verification (Room: JB-1)
Chair: Lin Liu, China
• Formal Verification of Protocol Properties of Sequential Java Programs: Ying Jin
• Unified Property Specification for Hardware/Software Co-Verification: Fei Xie, Huaiyu Liu
• Model Checking Aspect-Oriented Design Specification: Dianxiang Xu, Izzat Alsmadi, Weifeng Xu

11:30 – 13:30 Lunch

13:30-15:00 Parallel Sessions

Session H1: Requirements 4 - Ontology for Requirements Elicitation (Room: JB-3)
Chair: Lin Liu, China
• Towards a Multiple Ontology Framework for Requirements Elicitation and Reuse: Li Zongyong, Wang Zhixue, Yang Yingying, Wu Yue
• SREM: A Service Requirement Elicitation Mechanism based on Ontology: Jiang Xiang, Lin Liu, Wei Qiao

Session H4: Quality 5 - Analysis and Testing (Room: JB-1)
Chair: Jerry Gao, China
• Parameter and Return-value Analysis of Binary Executables: Jingbo Zhang, Rongcai Zhao, Jianmin Pang
• Test Case Generation for Collaborative Real-time Editing Tools: Lian Yu, Wenping Xiao, Changyan Chi, Lin Ma, Hui Su
• Contract-based Testing for Web Services: Guilan Dai, Xiaoqing Bai, Yongbo Wang, Fengjun Dai

15:00-15:30 PM Break

15:30-17:00 Parallel Sessions
**Session H3: Requirements 5 - Analysis and Modeling (Room: JB-3)**
Chair: Hong Zhu, UK
- A Method of Requirement Inconsistency Analysis: Zhang Yinkun, Yin Peng, Cui Duwu, Xia Hui (Short)
- Analysis of Conflicts among Non-Functional Requirements Using Integrated Analysis of Functional and Non-Functional Requirements: Vishal Sadana, Frank Liu (Short)
- A Metamodel for the Notation of Graphical Modeling Languages: Xiao He, Zhiyi Ma, Weizhong Shao, Ge Li (Short)

**Session H5: Quality 6 - Quality, Diversity and Services (Room: JB-1)**
Chair: Sahra Sedigh, USA
- Architectural Adaptation Addressing the Criteria of Multiple Quality Attributes in Mission-Critical Systems: Xiaofeng Cui, Yanchun Sun, Gang Huang, Hong Mei (Short)
- A Quality Verification Model for Design Pattern: Nien-Lin Hsueh, Peng-Hua Chu, William Chu, Chian-Chiun Lin (Short)
- Bivariate Software Fault-Detection Models: Toomotaka Ishii, Tadashi Dohi, Hiroyuki Okamura (Short)
- Construction of an Agile Software Product-Enhancement Process by Using an Agile Software Solution Framework (ASSF) and Situational Method Engineering: Asif Qumer, Brian Henderson-Sellers (Short)
- Model Oriented Evolutionary Redocumentation: Feng Chen, Hongji Yang (Short)

**Panel 6: Test Automation in Practice (Room: JB-2)**
Chair: Rajesh Subramanyan, USA
Panelists: Jürgen Kazmeier, Software Engineering, Siemens Corporate Research (SCR), Head of Software Engineering, Princeton NJ, USA; Aditya Matur, Computer Science, Purdue University Lafayette, USA; Chao Zhang, Software Engineering, Siemens Corporate Technology, Beijing, China; T.H. Tse, University of Hongkong; Lu-jie (Roger) Jiang, HP Global Application Services, China

17:15-18:30 COMPSAC 2007 Planning Meeting. All invited. Refreshments provided (Room: JB-1)

**Friday, July 27, 2007**

8:00-9:30 Plenary Panel 7 and Keynote 3: Industry Day Plenary Panel: Software for the Mobile Internet (Room RB: 1/2)
**Keynote:** Software for the Mobile Internet, Anson Chen, Corporate Vice President, Motorola, USA
**Chaired by:** Stephen Chen, Motorola, USA
**Panelists:** Anson Chen, Motorola Software Group, USA; Jay Kishigawa, NTT, Japan; Sumi Helal, University of Florida, USA; Yeun Bae Kim, Samsung, Samsung, Korea

9:30-10:00 AM Break

10:00-11:30 Industrial Track 1: Process Models (Room: MH-103)
Chair: Robert Lai, Taiwan
- State of Modernisation Practice in Four Swedish Organisations: Mira Kajko-Mattsson, Mi Ta, Lukas Wilczek
- ePVM - An Embeddable Process Virtual Machine: Thomas Weigold, Thorsten Kramp, Peter Buhler
- Analyzing and Re-Structuring Product Line Dependencies: Juha Savolainen, Ian Oliver, Varvana Mylläriemi, Tomi Männistö (Short)

11:30 – 14:00 Lunch

14:00-17:00
Industrial Track 2 - Data, Repositories, and Design Methods (Room: MH-103)
Chair: Tiberiu Seceleanu, Finland
- Towards a Design Methodology for Multiprocessor Platforms: Dragos Truscan, Tiberiu Seceleanu (Short)
- Specification, Design and Implementation of a Reuse Repository: Vanilson Burégio, Eduardo Almeida, Daniel Lucrédio, Silvio Meira (Short)
- DataWarp: Empowering Applications to make Progress in the Face of Contradictory or Inconsistent Data: Stephen Crouch, Peter Henderson, Robert Walters
- VOEditor: a Visual Environment for Ontology Construction and Collaborative Querying of Semantic Web Resources: Ling Li, Shengqun Tang, Lina Fang, Rufiang Xiao, Xinguo Deng, Youwei Xu, Yang Xu

15:00-15:30 PM Break

Industrial Track 3 - Networking and Distribution (Room: MH-103)
Chair: Hong Cai, China
- Mobile Game Development: Object-Orientation or Not: Weishan Zhang, Dong Han, Thomas Kunz
- A Dynamic-Reconfigurable Architecture for Protocol Stacks of Networked Systems: Mahdi Niemann, Rasool Jalili (Short)
- A Study on Distributed Resource Information Service in Grid System: Huo Juuyuan, Liu Liqun, Liu Li, Yang Yi, Li Lian (Short)
**COMPSAC 2007 Tutorials**

*Friday, July 27, 2007*

**10:00-17:00 Tutorial 1: Just Enough Requirements Management (Room: MH-101)**
Dr. Alan M. Davis

**Abstract:**
Requirements management (RM) needs to be made simpler, not more complex. And in today's world, where you need to accelerate development dramatically, RM must reduce, not extend, the total development effort. This tutorial will expose participants to easy-to-follow simple procedures that enable projects to start development quickly. It will increase the likelihood that systems will satisfy real user needs when delivered. Participants will learn the roles of systems and software requirements in system development, appreciate differences between elicitation, triage, and requirements specification, and be capable of selecting and using requirements techniques. The tutorial will cover a subset of the many principles put forth in the speaker's latest book, Just Enough Requirements Management (Dorset House).

**About the instructor:**
Al Davis is a professor at U. Colorado at Colorado Springs. He was a member of the board of directors of Requisite, CEO of Omni-Vista, VP at BTG, and Director of the Software Technology Center at GTE Laboratories. He has held academic positions at George Mason U.; U. Tennessee; U Western Cape, South Africa; U. Jos, Nigeria; U. Technology, Sydney, Australia; and U. Illinois at Urbana. He was EIC of IEEE Software 1994-1998. He is an editor for Journal of Systems and Software. He is the author of Software Requirements, 201 Principles of Software Development, Great Software Debates, and Just Enough Requirements Management. He has published 100+ articles and lectured 500+ times in over 20 countries. He is a fellow of IEEE and earned his Ph.D. (Computer Science) from U. Illinois.

**13:30-17:00 Tutorial 2: Emerging Technologies in Industrial Context: Component-Based and Service-Based Software Engineering (Room: MH-203)**
Dr. Ivica Crnkovic

**Abstract:**
Component-based software engineering (CBSE) and service-oriented software engineering (SOSE) are two similar but distinguished approaches in software engineering. In this tutorial, we compare CBSE and SOSE and analyze them from different perspectives. We discuss the possibility of combining the strengths of the two paradigms.

**About the instructor:**
Ivica Crnkovic is professor in Software Engineering at Malardalen University, Sweden. He has been co-organizer of CBSE symposium in last six years and has written a book and many papers in this area.
COMPSAC 2007 Workshops

Monday, July 23, 2007

Workshop 1: The Second IEEE Asia-Pacific Workshop on Software Architectures and Component Technologies (SACT 2007)
Organizer and Chair: Antony Tang and Jun Han, Swinburne University of Technology, Australia; Muhammad Ali Babar, Lero, Ireland; Hongyu Zhang, Tsing Hua University, China

8:00–9:30 Session 1: Software Patterns, Frameworks and Architectures (Room: MH-103)
Chair: Jun Han
• The Accessibility Analysis Pattern, M.E. Fayad
• A Composite Design Pattern for Object Frameworks, D. Thu Tran and T. B. Tran Huynh
• Extracting High-level Component-Connector Views from Detailed UML Models: A Case Study, Arvind Kiwelekar and Rushikesh Joshi

9:30–10:00 AM Break

10:00-11:30 Session 2: Component Software and Technologies (Room: MH-103)
Chair: Hongyu Zhang
• Dynamic Reconfiguration of Distributed Data Flow Systems, Zhikun Zhao and Wei Li
• Visualization of Concurrent Program Traces, Cyrille Artho, Klaus Havelund, and Shinichi Honiden
• AOP-based Testability Improvement for Component-based Software, Chengying Mao
• Salomé Platform Component Model for Numerical Simulation, André Ribes and Christian Caremoli

Organizer and chair: Jerry Gao, San Jose State University, USA; Jingsha He, Beijing University of Technology, China; Axel Küpper, Ludwig-Maximilians-University Munich, Germany; Claudia Linhoff-Popien, Ludwig-Maximilians-University Munich, Germany; Simon Shim, SAP Labs, USA.

8:00-9:30 Session 3: Applications and Services (Room: MH-101)
Chair: Jingsha He
• An Instant Messaging Framework for Flexible Interaction with Rich Clients: Matthias Book, Volker Gruhn
• Understanding 2D-Barcode Technology and Applications in M-Commerce – Design and Implementation of a 2D Barcode Processing Solution: Jerry Zeyu Gao, Lekshmi Prakash, Rajnii Jagatesan
• An Optimization Method For Real-Time Natural Phenomena Simulation on WinCE Platform: Ning Liu, Rong Li, Zhenyu Yang, Hongyang Chao

9:30–10:00 AM Break

10:00-11:30 Session 2: Technologies for M-Commerce (Room:MH-101)
Chair: Axel Küpper
• MiniWap: Navigating WAP with Minimo: Vu Hong Khiem, Park Jeongkyu, Lee Keung Hae
• A One-Dimensional Probabilistic Model of Wireless Multihop Internet Access: Chun-Yen Hsu, Jean-Lien C. Wu, Shun-Te Wang
• A Distributed Intrusion Detection Scheme for Ad Hoc Networks: Yingfang Fu, Jingsha He, Guorui Li

11:30-13:30 Lunch

13:30-17:30 Session 3: Middleware and Service Platforms (Room: MH-101)
Chair: Hsing Mei
• A Virtual Machine-Based Programming Environment for Rapid Sensor Application Development: Jui-Nan Lin, Jiun-Long Huang
• Wireless Multimedia Framework Based on STBC-OFDM: Zhang Xizheng, Tang Zhihang, Wang Yaonan

13:30-17:30 Session 4: Ambient Intelligence and Pervasive Computing (Room: MH-101)
Chair: Lee Keung Hae
• Dynamic Configuration Based on Mobile Middleware in AmI System: Shao Wang, Rui Chen, Yi-bin Hou, Zhang-qin Huang
• A Framework for Local Ambient Intelligence Space Application System: The AmI-Space Project: Chen Rui, Zhang Yong, Hou Yin-bin, Huang Zhang-qin, Li Hui
• A Service Discovery Architecture based on Anycast in Pervasive Computing: Li Zhang, Zhen-lian Shi, Qi Shen

13:30-17:30 Session 5: Mobility Support (Room: MH-101)
Chair: Jerry Gao
• F5 Golf — Developing Location-based Multi-Player Games: Georg Treu, Johannes Martens, Matthias Schicker, Mark Breisinger, Axel Küpper
• Speed-Based Mobility Management for Heterogeneous Wireless Networks Interworking: Ming-Hsien Yu, Hsing Mei
• A Mobile Database Design Methodology for Mobile Software Solutions: Weider Yu, Sunita Sharma

15:00-17:00 Refreshments will be served for two hours

Workshop 3: The Fourth IEEE International Workshop on Software Cybernetics (IWSC 2007)
Organizer and Chair: Kishor S. Trivedi, Duke University, USA; Qianxiang Wang, Peking University, China; W. Eric Wong, University of Texas at Dallas, USA; Bojan Cukic, West Virginia University, USA

8:00-9:30 Session 1 Papers I (Room: MH-105)
9:30 to 10:00 AM Break

10:00-11:30 Session 2 Invited Talks (Room: MH-105)
Chair: Kai-Yuan Cai
• An Approach to Adaptive Distributed Execution Monitoring for Workflows in Service-based Systems: Stephen S. Yau and Dazhi Huang
• A Family of Software Reliability Growth Models: Harald Stieber
• Managing Service-Oriented Computing: Wei-Tek Tsai

11:30-13:30 Lunch

13:30-17:30 Session 4: Papers II (Room: MH-105)
Chair: Bojan Cukic
• Towards Controllable Requirements Engineering Processes based on Cybernetics: Lin Liu, Zhi Jin, Ruqian Lu
• Adaptive Web Services Testing: Xiaoying Bai, Zhongkui Shao, Wei-Tek Tsai, Yinong Chen
• A Control-Theoretic Approach to QoS Adaptation in Data Stream: Hai Hu, Chang-Hai Jiang, Kai-Yuan Cai, W. Eric Wong

15:00-17:00 PM Refreshments will be served for two hours

Organiser and Chair: Sheikh Iqbal Ahamed, Marquette University Milwaukee, USA; Mohammad Zulkernine, Queen's University, Canada.

8:00–9:30 Session 1: Security, Privacy and Trust in Software Applications - I (Room: MH-104)
Chair: Mohammad Zulkernine
Keynote speech: Social Modeling for System Security: Eric Yu, University of Toronto, Canada
• A Soft Constraint Privacy Model based on Identifiability: Weifang Chen, Zhen Liu, Anton Riabov
• Security Enhancement of a Novel Proxy Key Generation Protocol: Ching-Chou Tsai, Kuan-Chieh Liao, Tzung-Her Chen, Wei-Bin Lee

9:30-10:00 AM Break

10:00-11:30 Session 2: Security, Privacy and Trust in Software Applications - II (Room: MH-104)
Chair: Sheikh Iqbal Ahamed
• An Efficient Software Implementation of AES-CCM for IEEE 802.11i Wireless Standard: Abdul Samiah, Arshad Aziz, Nassar Ikram
• Towards the Modeling of Personal Privacy in Ubiquitous Computing Environments: Ryan Babbitt, Johnny Wong, Carl Chang
• Secure Multi-Agent Based Digital Coin Scheme: Mohamed Aborizka, Mohamed Kout, Sherif Saad, Mostafa Salama, Krishna Kavi

Workshop 5: The Third IEEE Asian Workshop on Aspect-Oriented Software Development (AOAsia 2007)
Organizers and Chair: Elisa Baniassad, Chinese University of Hong Kong; Kung Chen, National Chengchi University; Shigeru Chiba, Tokyo Institute of Technology; Jan Hannemann, University of Tokyo; Hidehiko Masuhara, University of Tokyo; Shangping Ren, Illinois Institute of Technology; Jianjun Zhao, Shanghai Jiao Tong University (Primary Organizer)

8:00-9:30 Session 1: Regular Presentation (Room: MH-106)
• Specifying Pointcut in AspectJ: Yi Wang, Jianjun Zhao
• A Tool for Compiler Construction based on Aspect-oriented Specifications: Damijan Rebernak, Marjan Mernik
• AGENT: A Framework for Automatic Generation of Testcases for Aspect Oriented Software: Gayathri K, Chitra Babu

9:30-10:00 AM Break

10:00-11:00 Group Discussion (Room: MH-106)
11:00-11:30 Short Presentation (Room: MH-106)
11:30-13:30 Lunch

13:30-14:30 Session 2 (Room: MH-106)
• Automated Unit Test Classification of Large Benchmarks: Cyrille Artho, Zhongwei Chen, Shinichi Honiden
• Aspect-Based Instrumentation for Locating Memory Leaks in Java Programs: Kung Chen, Ju-Bing Chen
• A Combined Concept Location Method for Java Programs: Dapeng Liu, Shaochun Xu

14:30-15:00 Group Discussion (Room: MH-106)

15:00-15:30 PM Break

15:30-16:00 Short Presentation (Room: MH-106)
16:00-17:00 Group Discussion and Summary (Room: MH-106)
Workshop 6: The First IEEE International Workshop on Requirements Engineering For Services (REFS 2007)

Organizer and Chair: Eric Yu, University of Toronto, Canada; Lin Liu, Tsinghua University, China; Zhi Jin, Chinese Academy of Sciences, China; Jian Yang, Macquarie University, Australia

8:00-9:30 Session 1: Workshop Keynote (Room: MH-201)
Chair: Eric Yu
- Requirements Engineering For Services: Does it make sense?: Alan M. Davis

9:30-10:00 AM Break

10:00-11:30 Session 2: RE for Service (Room: MH-201)
Chair: Zhi Jin
- An Intentional Perspective to Service Modeling and Discovery: Colette Rolland, Rim-Samia Kaabi
- Requirements and Evaluation of Protocols and Tools for Transaction Management in Service Centric Systems: Changai Sun, Marco Aiello
- Requirements for QoS-based Web Service Description and Discovery: Kyriakos Kritikos, Dimitris Plexousakis
- Towards an Agile Infrastructure to Provision Devices, Applications, and Networks: A Service-oriented Approach: Sandy Liu, Bruce Spencer, Yong Liang, Bo Xu, Libo Zhang, Martin Brooks
- An Object-Oriented Modular Petri-Nets for Modelling Service Oriented Applications: Ching Huey Wang and Feng Jian Wang

11:30-13:30 Lunch

13:30-15:00 Session 3: RE and Services (Room: MH-201)
Chair: Jian Yang
- Requirements, Plato’s Cave, and Perceptions of Reality: Alan Davis, Kesav Nori
- Non-Functional Computing: Towards a more Scientific Treatment to Non-functional Requirements: Kai-Yuan Cai
- Developing Non-Functional Requirements for a Service-Oriented Software Platform: Xiping Song
- Experiences in Accurately Estimating Electronic Forms Services with a Spiral Estimate Process: Zhoulin Dai, Yi Gu, Jun Liu, Yi Jie Xu
- A Framework of Adaptive Requirements Engineering for USCE: Cheng Bo: Meng Xiang-Wu, Chen Jun-Liang
- Frameworks of Composite Services Execution Engine with Feedback Control: Chunming Gao, Huang Tan, Huowang Chen

15:00-15:30 PM Break

15:30-17:00 Session 4: REFS Panel: Requirements Engineering For Services: Future Directions (Room: MH-201)
Moderator: Lin Liu
Panelists: Al Davis, Colette Rolland, Eric Yu, Jian Yang, Xinsheng Mao, Chi-hung Chi, Zhi Jin


Organizer and chair: Atilla Elci, Eastern Mediterranean University, North Cyprus; Mamadou Tadiou Kone, Laval University, Canada; Mehmet A. Orgun, Macquarie University, Australia; Tharam S. Dillon, University of Technology Sydney, Australia.

8:00–9:30 Session 1: Applications (Room: MH-102)
Chair: Atilla Elci
- Trend Analysis using a Temporal Language in News Domains: Sang-Kyun Kim, and Kyu-Chul Lee
- Construction of Collaborative Design Environment Based on Multi-Agent: Xiangzhong FENG
- Extending the Gaia Methodology for the Design and Development of Agent-based Software Systems: Wei Huang, Elia El-Darzi, and Li Jin

9:30-10:00 AM Break

10:00–11:30 Session 2: Platforms (Room: MH-102)
Chair: Aditya Ghose
- OWL-Based Description for Agent Interaction: Yong-Feng Lin, and Jason Jen-Yen Chen
- Adaptive Agent Model: an Agent Interaction and Computation Model: Liang Xiao, Dave Robertson, Madalina Croitoru, Paul Lewis, Srinandan Dashmapatra, David Dupplaw, and Bo Hu
- Extending the Gaia Methodology for the Design and Development of Agent-based Software Systems: Wei Huang, Elia El-Darzi, and Li Jin

11:30-13:30 Lunch

13:30-15:00 Session 3: Models (Room: MH-102)
Chair: Masoud Mohammadian
- An Ontology-based Semantic Resource Sharing Model in P2P System: Dan Wang, and Rongjian Zhao

Keynote Speech:
- Actor Eco-Systems: From High-Level Agent Models to Executable Processes via Semantic Annotations: Aditya Ghose and George Koliadis

Position Papers:
- Intelligent Agents and P2P Semantic Web: Mehmet A. Orgun
- A Distress Call: Needed Tools to Large-Scale Semantic-Aware Agent Systems: Atilla Elçi
- Semantic Web and Intelligent Agents Research and Practice: Masoud Mohammadian
Workshop 8: The First IEEE International Workshop on Software Patterns: Addressing Challenges (SPAC 2007)

Organizer and Chair: Dr. M.E. Fayad, San Jose State University, USA; Dr. H.S. Hamza, Cairo University, Egypt; Eduardo Segura, vrlSoft, Inc., USA

Session 1: 10:00-11:30 Introduction Word of Welcome (Room MH-102)
Chair: M. Fayad
• Component Oriented Design Style: Jing-Ying Chen
• A Framework for Open Distributed System Design: Alexei Iliasov, Alexander Romanovsky, Budi Arief, Linas Laibinis, Elena Troubitsyna
• The Lifecycle Stable Analysis Pattern: M. Fayad

11:30-13:30 Lunch

13:30-15:30 Session 2 (Room MH-102)
Chair: M. Fayad
• Meta-Specification and Cataloguing of Software Patterns: Towards a More Dynamic Patterns Life Cycle: León Welicki, Juan Manuel Cueva Lovelle
• Pattern mining in a project-based environment: Lotte De Rore, Monique Snoeck, Guido Dedene
• Architectural Design of a Collaborative Design Pattern Repository: Hongjun Su, Hong Zhang, W. Eric Wong

Discussion Session
Closing remarks


Organizers and Chair: Fabrizio Fabrini, Mario Fusani, Giuseppe Lami Istituto di Scienza e Tecnologie dell'Informazione "Alessandro Faedo"
Area della Ricerca CNR di Pisa

15:30-18:00 (Room: MH-102)
• Method Based on OSEK/VDX Platform Using Model-based and Autocode Technology for Diesel ECU Software Development: Chunyang Mu, Lining Sun, Zhijiang Du, Yanchun CHEN
• A Component Model for the AUTOSAR Virtual Function Bus: Dietmar Schreiner, Karl M. Göschka
• Repository based Infrastructures for effective Automotive Software Creation - an Experience Report: Olaf Kath, Marc Born, Michael Soden
• Panel Automotive Software: Software Engineering Challenges, Business Opportunities

Workshop 10: The First IEEE International Workshop on Development and Application of Knowledge Based Software Engineering Tool (KASET 2007)

Organizer and Chair: Li Jiang, University of Adelaide, Australia; Armin Eberlein, American University of Sharjah, UAE; Lawrence Chung, The University of Texas at Dallas, USA.

10:00–11:30 Session 1 (Room: MH-104)
Chair: Rudolf Ramler
• Setting and Evaluation of Flexible Points on Software User Interface: Limin Shen, Wenwen Jiang, Chunyan Gao
• Observing Distributions in Size Metrics: Experience from Analyzing Large Software Systems: Rudolf Ramler, Klaus Wolfmaier, Thomas Natschlaeger
• Software Reliability Growth Modelling using a Weighted Laplace Test Statistic: Yan Luo, Torsten Bergander, A. Ben Hamza

11:30-13:30 Lunch Break

13:30-15:30 Session 2 (Room: MH-104)
Chair: Li Jiang
• A Collaborative System for Software Engineering Education: Hong Zhang, Hongjun Su
• A Requirements Process Engineering Tool: Li Jiang, Eberlein Armin
• Agents, Cases-Based Reasoning and their relation to the Mexican Software Process Model (MoProSoft): Elena Cardenas Vargas, Hanna Oktaba, Silvia Guardatti Bueno, Ana Lilia Laureano Cruces

15:30-16:45 Session 3 (Room: MH-104)
Chair: LinPeng Huang
• Research on Dynamic Update Transaction for Java Classes: Shi Zhang, LinPeng Huang
• Ontologies, JavaBeans and Relational Databases for Enabling Semantic: Ioannis Athanasiadis, Ferdinando Villa, Andrea-Emilio Rizzoli
• CGR: a Tool for Programming Using Schemes: Jonatan Garcia, Antonio Gavilanes Ana Gil, Pedro Jesus Martin

16:45-18:00 Session 4 (Room: MH-104)
Chair: Hsin-Yi Jiang
• System Modification Case Studies: Yulin Ding, Yan Zhang
• A History-Based Automatic Scheduling Model for Personnel Risk Management: Hsin-Yi Jiang, Carl K. Chang, Jinchun Xia, Shuxing Cheng
• Managing Policy Interactions in KNX-Based Smart Homes: Mohamed Shehata, Armin Eberlein, Abraham Fapojuwo, AbdAllah Mohamed

15:00-16:00 PM Break (One hour)


Organizer and Chair: Yan Liu, National ICT Australia, Australia; Liming Zhu, National ICT Australia, Australia; Ian Gorton, Pacific Northwest National Laboratory, Australia; Shiping Chen, CSIRO ICT Centre, Australia; Qing Wang, Chinese Academy of Science, China
10:00-11:00 Invited Talk (Room: MH-201)
The Four Major Challenges of Engineering Adaptive Software Architecture: Jun Han and Alan Colman, Swinburne University of Technology, Australia

11:00-11:30 Session 1 (Room: MH-201)
• A Service-oriented Approach for Flexible Information Resource Integration: Zhuohao Wang, Zhuofeng Zhao, Jun Fang

11:30-13:30 Lunch

13:30-15:00 Session 2 (Room: MH-201)
• Adaptability Evaluation of Software Architectures: A Case Study, by Pentti Tarvainen
• Decision Support for Dynamic Adaptation of Business Systems Based on Feature Binding Analysis: Liwei Shen, Xin Peng, Wenyun Zhao
• Towards Requirements Engineering for Context Adaptive Systems: Wasiou Sitou, Bernd Spanfelner
• Toward Runtime Self-adaptation Method in Software-Intensive Systems Based on Hidden Markov Model: Hua Wang, Jing Ying

15:00-16:00 PM Break (One hour)

15:50-17:00 Session 3 (Room: MH-201)
• An Adaptive Approach for Web Cache Pre-fetching: Wenying Feng, Hua Chen
• SLA-based Data Integration on Database Grid: Tiezhen Nie, Guangqi Wang, Derong Shen, Meifang Li, Ge Yu
• A Framework for Separation of Concerns in Concurrent Programming: Rafael Ramirez, Andrew Santosa

Workshop 12: The First IEEE International Workshop on Quality Oriented Reuse of Software (QUORS 2007)
Organizer and chair: Xiaodong Liu, Napier University, UK; Hongji Yang, De Montfort University, UK; Kyo Kang, Pohang University of Science & Technology, Korea.

10:00-10:30 Panel Discussion Session (Room: MH-106)
Chair: Hongji Yang

10:30-11:30 Session 1: Aspects and SE (Room: MH-106)
Chair: Xiaodong Liu
• Improvement of Object-Oriented System Analysis and Design with Aspects: Guo Yanhong, Teng Guifa, Li Yueli, Wang Fang, Zhao Yang, Ma Jianbin
• Using Aspect Orientation in Understanding Legacy COBOL Code: Junjun Pu, Zhuopeng Zhang, Jian Kang, Yang Xu, Hongji Yang
• A Connector-Centric Approach to Aspect-Oriented Software Evolution: Yiming Liu, Wenyun Zhao, Xin Peng, Shan Tang

11:30-13:30 Lunch

13:30-15:00 Session 2: Components and QoS (Room: MH-106)
Chair: Hongji Yang
• The Empirical Studies on Quality Benefits of Reusing Software Components: Jingyue Li, Anita Gupta, Jon Arvid Børretzen, Reidar Conradi
• A Product Line Based Aspect-Oriented Generative Unit Testing Approach to Building Quality Components: Yankui Feng, Xiaodong Liu, Jon Kerridge
• An Automatic Connector Generation Method for Dynamic Architecture: Yiming Yang, Xin Peng, Wenyun Zhao
• Four Automated Approaches to Analyze the Quality of UML Sequence Diagrams: Marcel van Amstel, Christian Lange, Michel Chaudron

15:00-16:00 Break (One hour)

15:30-17:00 Session 3: Internet Applications (Room: MH-106)
Chair: Marcel van Amstel
• QoS-driven Service Selection Optimization Model and Algorithms for Composite Web Services: Wentao Zhang, Yan Yang, Shengqun Tang, Lina Fang
• Verification of Web Service Conversations Specified in WSCL: Zhifeng Gu, Juanzi Li, Jie Tang, Bin Xu, Ruobo Huang
• Quality Metrics for Internet Applications: Developing "New" from "Old": Shikun Zhou, Xiaodong Liu

Organizer and Chair: Sami Beydeda, ZIVIT, Germany; David Kung, University of Texas at Arlington, USA

10:00-11:30 Session 1: Test models, methods and tools for new technologies (Room: MH-202)
Chair: Hong Zhu
• A Unified Framework of the Modeling of Fault-Detection and Fault-Correction Processes in Software Reliability Analysis: Jung-Hua Lo
• Automated Testing EJB Components Based on Algebraic Specifications: Liang Kong, Hong Zhu, Bin Zhou
• Built-in Regression Testing for Component-based Software Systems: Chengying Mao
• Towards Automatic Regression Test Selection for Web Services: Michael Ruth, Shengru Tu

11:30-13:30 Lunch

13:30-15:00 Session 2 (Room: MH-202)
Chair: Hong Zhu
• Generating User Acceptance Test Plans from Test Cases: Karl R.P.H. Leung, W.L. Yeung
• Client based Object-Oriented Cohesion Metrics: Sami Mäkelä, Ville Leppänen
• A new Approach to Detecting Dynamic Memory Errors in C Programs: Dae Wan Cho, Hyeon Soo Kim
• Learning Parameterized State Machine Model for Integration Testing: Muzammil Shahbaz, Keqin Li, Roland Groz
Organizer and Chair: Michael Jiang, Motorola Labs, USA; Patrick McDaniel, Pennsylvania State University, USA; Jan Jurjens, the Open University, UK; Yan Liu, Motorola Labs, USA

10:00-11:30 Session 1 (Room: MH-105)
Chair: Michael Jiang
- ACIR: An Aspect-Connector Based Intrusion Response Approach for Component-Based Software: Mohammad Uddin, Hossain Shahriar, Mohammad Zulkernine
- Test Generation from Security Policies Specified in Or-BAC: Keqin Li, Laurent Mounier, Roland Groz
- An Adaptive Security Model for Multi-agent Systems and Application to a Clinical Trials Environment: Liang Xiao, Andrew Peet, Paul Lewis, Srinandan Dasmahapatra, Carlos Sáez, Madalina Croitoru, Javier Vicente, Horacio González-Vélez, Magí Lluch

11:30-13:30 Lunch

13:30-15:00 Session 2 (Room: MH-105)
Chair: Michael Jiang
- Avoiding Privacy Violation for Resource Sharing in Ad hoc Networks of Pervasive Computing Environment: KM Asif, Sheikh Ahamed
- Conformance Checking of Access Control Policies Specified in XACML: Vincent Hu, Evan Martin, Tao Xie
- Process Activities Supporting Security Principles: Koen Buyens, Riccardo Scandariato, Wouter Joosen

COMPSAC 2007 Doctoral Symposium
Wednesday, July 25, 2007

13:30-17:00 (Room: RB-4), 15:00-15:30 PM Break
Chair: Sahra Sedigh, USA
- Challenges in Selecting COTS Component Guideline: Walisa Romsaiyud
- Management and Control of Coding and Testing of Component-based Software: Tatiane Lopes, Clovis Fernandes
- Model Checking of Component Connectors: Mohammad Izadi, Ali Movaghar, Farhad Arbab
- Towards End User Service Composition: Xuanzhe Liu, Gang Huang, Hong Mei

COMPSAC 2007 Fast Abstracts
Thursday, July 26, 2007

10:00-11:30
Session 1: Software Engineering Methods and Tools (Room: JB-2)
Chair: Eric Yu
- An Empirical Evaluation of Fault-based Testing for General Boolean Specifications: Zhenyu Chen, Baowen Xu, Changhai Nie
- Patterns Topology for Performance Evaluation: Mohamed. E. Fayad
- Mining Software Repositories to Understand the Performance of Individual Developers: Shen Zhang, Yongji Wang, Feng Yuan, Li Ruan
- Adaptive Performance Tuning for Internet-Based Workflows: Paolo Vercesi, Alberto Bartoli
- Towards Capability Maturity in Software Review: Bin Xu, Hua Hu, Xiaohu Yang
- Fuxi: An Agile Development Environment for Embedded Systems: Zhongbin Wang
- OCL4X: An Action Semantics Language for UML Model Execution: Jiang Ke, Zhang Lei, Miyake Shigeru

13:30-15:00
Session 2: Software Applications (Room: JB-2)
Chair: Chi-Hung Chi
- WEB-Service Architecture: a solution for e-Government Application: Aurelie Aurilla Bechina Arntzen
- An Aspect-Oriented Intrusion Detection Framework: Zhi Jian Zhu, Mohammad Zulkernine
- An Innovative Workflow Product Structure: All Application Data Are Relevant to Workflow: Haiping Zha, Jianming Wang
- Matrix-based Change Impact Analysis for Component-based Software: Chengying Mao, Jinlong Zhang, Yansheng Lu
- An Novel Authentication Scheme Based on Trust-value Updated Model in Ad Hoc Network: Ya-tao YANG, Yong FANG, Ping ZENG, Ya-ping CHI
- luv: A Programming Language for Describing Human Relationships: Michael de la Maza
- The Execution Mechanism of Service Proxy in the Web Services Composition Execution Engine: Channing Gao, Xiaojuan Yuan, Huowang Chen
- Web System for Electronic Navigational Charts Service Based On ArcIMS: Zhu Feixiang, ZhuANG Yingjun, Zhu Berlin
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MH: Meeting Hall (Right side of the Friendship Palace)
RB: Building 7 (Left side of the Friendship Palace, Ruibin Building)
JB: Building 8 (Left side of the Friendship Palace, Jiabin Building)