The Tenth IEEE International EDOC Conference
The Enterprise Computing Conference

Conference Program

16th – 20th October 2006, Hong Kong

Co-hosted by:
The Hong Kong Polytechnic University
City University of Hong Kong

Sponsored by:
IEEE
IEEE Computer Society
IEEE Communications Society
IEEE Hong Kong Section Computer Society Chapter
KC Wong Education Foundation

In Cooperation with:
IT Professional
ACM
### EDOC 2006 Final Program

#### Workshops at Regal Kowloon Hotel

<table>
<thead>
<tr>
<th>October 16</th>
<th>Montparnasse I</th>
<th>Montparnasse II</th>
<th>Montparnasse III</th>
<th>Montparnasse IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00</td>
<td>IWMEC 1</td>
<td>MWS 1</td>
<td>VORTE 1</td>
<td>TEAR 1</td>
</tr>
<tr>
<td>10:30</td>
<td>Coffee</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11:00</td>
<td>IWMEC 2</td>
<td>MWS 2</td>
<td>VORTE 2</td>
<td>TEAR 2</td>
</tr>
<tr>
<td>12:30</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14:00</td>
<td>IWMEC 3</td>
<td>MWS 3</td>
<td>VORTE 3</td>
<td>TEAR 3</td>
</tr>
<tr>
<td>15:30</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16:00</td>
<td>IWMEC 4</td>
<td>MWS 4</td>
<td>VORTE 4</td>
<td>TEAR 4</td>
</tr>
<tr>
<td>17:30</td>
<td></td>
<td></td>
<td></td>
<td>End day 1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>October 17</th>
<th>Montparnasse I</th>
<th>Montparnasse II</th>
<th>Montparnasse III</th>
<th>Montparnasse IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00</td>
<td>WODPEC 1</td>
<td>AQuSerM 1</td>
<td>EDM 1</td>
<td>SISS 1</td>
</tr>
<tr>
<td>10:30</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11:00</td>
<td>WODPEC 2</td>
<td>AQuSerM 2</td>
<td>EDM 2</td>
<td>SISS 2</td>
</tr>
<tr>
<td>12:30</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14:00</td>
<td>WODPEC 3</td>
<td>AQuSerM 3</td>
<td>EDM 3</td>
<td></td>
</tr>
<tr>
<td>15:30</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16:00</td>
<td>WODPEC 4</td>
<td>AQuSerM 4</td>
<td>EDM 4</td>
<td></td>
</tr>
<tr>
<td>17:30</td>
<td></td>
<td></td>
<td></td>
<td>End day 2</td>
</tr>
</tbody>
</table>

#### Conference at Kowloon Shangri-La Hotel

<table>
<thead>
<tr>
<th>October 18</th>
<th>Rose/Peony</th>
<th>October 19</th>
<th>Rose/Peony</th>
<th>October 20</th>
<th>Rose/Peony</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:30</td>
<td>Opening</td>
<td>8:30</td>
<td>Keynote 2</td>
<td>8:40</td>
<td>Short 5</td>
</tr>
<tr>
<td>8:40</td>
<td>Keynote 1</td>
<td>9:30</td>
<td>Short 4</td>
<td>9:30</td>
<td>Short 6</td>
</tr>
<tr>
<td>9:40</td>
<td>Short 3 (S)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10:20</td>
<td>Coffee</td>
<td>10:20</td>
<td>Coffee</td>
<td>10:20</td>
<td>Coffee</td>
</tr>
<tr>
<td>10:35</td>
<td>Regular 1</td>
<td>10:35</td>
<td>Regular 4</td>
<td>10:35</td>
<td>Regular 7</td>
</tr>
<tr>
<td>11:50</td>
<td>Regular 2</td>
<td>11:50</td>
<td>Regular 5</td>
<td>11:50</td>
<td>Regular 8</td>
</tr>
<tr>
<td>13:05</td>
<td>Lunch</td>
<td>13:05</td>
<td>Lunch</td>
<td>13:05</td>
<td>Lunch</td>
</tr>
<tr>
<td>15:10</td>
<td>Coffee</td>
<td>15:10</td>
<td>Coffee</td>
<td>15:10</td>
<td>Coffee</td>
</tr>
<tr>
<td>15:20</td>
<td>Regular 10(L)</td>
<td>15:20</td>
<td>Regular 11(L)</td>
<td>15:20</td>
<td>Short 1</td>
</tr>
<tr>
<td>16:10</td>
<td></td>
<td></td>
<td></td>
<td>16:10</td>
<td>Short 2</td>
</tr>
<tr>
<td>17:00</td>
<td>End day 1</td>
<td>17:00</td>
<td>End day 2</td>
<td>17:00</td>
<td>End day 3</td>
</tr>
<tr>
<td>18:00-20:00</td>
<td>Reception</td>
<td>18:00-21:00</td>
<td>Banquet</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20:00-23:00</td>
<td>Hong Kong Tour</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Workshop Room Layout

Conference Room Layout

Orchid Room & Foyer
Program Details

Workshops on 16 October 2006

VORTE: Vocabularies, Ontologies and Rules for the Enterprise

Marcus Spies, University of Munich, Germany
Giancarlo Guizzardi, Laboratory for Applied Ontology (ISTC-CNR), Italy
Gerd Wagner, Brandenburg Univ. of Technology at Cottbus, Germany

MWS: Middleware for Web Services

Aad van Moorsel, University of Newcastle upon Tyne, UK
Raymond Wong University of New South Wales, Australia
Vladimir Tosic, Lakehead University, Canada

IWMEC: Models for Enterprise Computing

Jean Bézivin, University of Nantes, France
Jeffrey G. Gray, University of Alabama at Birmingham, USA
Alfonso Pierantonio, Università degli Studi dell’Aquila, Italy

TEAR: Trends in Enterprise Architecture Research

Marc M. Lankhorst, Telematica Instituut, the Netherlands
Maarten W.A. Steen, Telematica Instituut, the Netherlands

Workshops on 17 October 2006

WODPEC: ODP for Enterprise Computing

João Paulo A. Almeida, Telematica Instituut, The Netherlands
Peter F. Linington, University of Kent, UK
Akira Tanaka, Hitachi, Japan
Bryan Wood, Open-IT Ltd, UK

AQuSerM: Advances in Quality of Service Management

Iman Poernomo, King’s College London, UK
Guijun Wang, Boeing, USA

EDM: Electronic Document Management in an Enterprise Computing Environment

Thomas Kwok, IBM Research Division, USA
William Cheung, Hong Kong Baptist University, Hong Kong

SISS: Service Intelligence and Service Science

Dickson K. W. Chiu, Dickson Computer Systems, Hong Kong
Ho-fung Leung, The Chinese University of Hong Kong
2006 Vocabularies, Ontologies and Rules for the Enterprise Workshop (VORTE) at the EDOC 2006 Conference

October 16, 2006 at Montparnasse III of the Regal Kowloon Hotel in Hong Kong

WORKSHOP PROGRAM

09:00 Session 1
- Marcus Spies, Introduction and Overview
- Christophe Roche, How Words map Concepts
- Patricia Dockhorn Costa, Giancarlo Guizzardi, Joao Paulo A. Almeida, Luís Ferreira Pires, Marten van Sinderen, Situations in Conceptual Modeling of Context

10:40 Coffee break

11:00 Session 2
- Kuldar Taveter, A Technique and Markup Language for Business Process Automation

12:30 Lunch

14:00 Session 3
- Colin Atkinson, Models versus Ontologies - What's the Difference and where does it Matter? (invited talk)
- General Discussion

15:30 Coffee break

16:00 Session 4
- Axel Korthaus, Martin Schader, Using a Topic Grid and Semantic Wikis for Ontology-Based Distributed Knowledge Management in Enterprise Software Development Processes
- David Aveiro, Jose Tribolet, An ontology for organizational functions: the recursive self-maintenance mechanism of the enterprise

WORKSHOP CO-ORGANIZERS
- Marcus Spies, University of Munich, Germany
- Giancarlo Guizzardi, Laboratory for Applied Ontology (ISTC-CNR), Italy
- Gerd Wagner, Brandenburg Univ. of Technology at Cottbus, Germany

WORKSHOP PROGRAM

09:00  Session 1
- Welcome by Raymond Wong and self-introduction of all participants
- Keynote by Professor Lionel M. Ni (http://www.cse.ust.hk/~ni/, Hong Kong University of Science and Technology, Hong Kong)
- Discussion

10:30  Coffee break

11:00  Session 2
- “Towards Explanation-Aware Selection in Internet-Scale Infrastructures: Generating Rationale for Web Services Ratings and Reputation”: W. Sherchan, S.W. Loke & S. Krishnaswamy
- “A Data Centric Approach for Workflows”: A. Akram, J. Kewley & R. Allan
- “Triple Space Computing Middleware for Semantic Web Services”: O. Shafiq, R. Krummenacher, F. Martin-Recuerda, Y. Ding & D. Fensel

12:30  Lunch

14:00  Session 3
- “A Service Mediator Based Information System: Service-Oriented Federated Multiple Document Management”: L. Russo & S. Chung
- “A Mediation Framework for Mobile Web Service Provisioning”: S.N. Srirama, M. Jarke & W. Prinz

15:30  Coffee break

16:00  Session 4
- “A CoS-Enabled Request Scheduling Policy”: Y. Yang, Y. Tang, M. Zhao, L. Yao
- Open forum “Requirements and Challenges for Middleware Supporting Reliability of Web Service Composition” moderated by Raymond Wong
- Ending remarks by Raymond Wong

WORKSHOP CO-ORGANIZERS
- Dr. Vladimir Tosic, Department of Computer Science, The University of Western Ontario, London, Ontario, Canada, and School of Computer Science & Engineering, The University of New South Wales, Sydney, New South Wales, Australia
- Dr. Raymond Wong, School of Computer Science & Engineering, The University of New South Wales, NICTA, and Green Pea Software, Sydney, New South Wales, Australia
- Dr. Aad van Moorsel, School of Computing Science, The University of Newcastle upon Tyne, Newcastle upon Tyne, England, United Kingdom
Trends in Enterprise Architecture Research (TEAR 2006)  
Workshop in conjunction with EDOC 2006, Hong Kong  
Monday, 16 October 2006  

October 16, 2006 at Montparnasse IV of the Regal Kowloon Hotel in Hong Kong

WORKSHOP PROGRAM

09:00 Session 1
- Opening and Introduction to Enterprise Architecture by Maarten Steen
- Essential Layers, Artifacts, and Dependencies of Enterprise Architecture by Robert Winter, Ronny Fischer
- General Integrated System Architecture and Enterprise Modeling Framework Study by Qing Li, Jian Zhou, Dafeng Xu

10:30 Coffee break

11:00 Session 2
- A reference model for IT management responsibilities by Magnus Gammelgård, Åsa Lindström, Mårten Simonsson
- Exploring Intentional Modeling and Analysis for Enterprise Architecture by Eric Yu, Markus Strohmaier, Xiaoxue Deng
- An Inquiry Tool for Stakeholder Concerns of Architectural Viewpoints: a Case Study at a Large Financial Service Provider by Henk Koning, Rik Bos, Sjaak Brinkkemper

12:30 Lunch

14:00 Session 3
- Dynamic Routing as paradigm for decentralized flexible process management by Alistair Barros, Gero Decker
- Expanding the Possibilities for Enterprise Computing: Multi-Agent Autonomic Architectures by Gilda Pour
- Enterprise Architecture Analysis and Application – An exploratory Study by Tobias Bucher, Ronny Fisher, Stephan Kurpjuweit, Robert Winter

15:30 Coffee break

16:00 Session 4
- Discussion and identification of trends and current research issues

WORKSHOP CO-ORGANIZERS
- Marc M. Lankhorst, Telematica Instituut, the Netherlands
- Maarten W.A. Steen, Telematica Instituut, the Netherlands
- Web site: http://tear2006.telin.nl/
Workshop on ODP for Enterprise Computing at the EDOC 2006 Conference

October 17, 2006 at Montparnasse I of the Regal Kowloon Hotel in Hong Kong

WORKSHOP PROGRAM

09:00 Opening
09:05 Session A: Technical aspects
   - On the Execution of ODP Computational Specifications
     José Raúl Romero and Antonio Vallecillo
     Peter F. Linington
   - Discussion session A: technical aspects
10:35 Coffee break
11:00 Session B: Applications and adoption
   - What applying of the ODP viewpoints teaches us about tool-chains
     Lea Kutvonen
   - Addressing interoperability in e-health: an Australian approach
     Zoran Milosevic
   - Discussion session B: applications and adoption
12:30 Lunch
14:00 Session C: ODP Revision
   - A Basis for Constructing and Evaluating Design Concepts
     Remco Dijkman
   - Revision of the RM-ODP standard: Objectives, Issues and Status
     Bryan Wood
   - Discussion session C: ODP revision
15:30 Coffee break
16:00 Session D: ODP and UML
   - The new ISO and ITU-T standard on UML for ODP
     Antonio Vallecillo
   - Discussion session D: UML for ODP
   - Closing: future editions (scope, format)

WORKSHOP CO-ORGANIZERS

- João Paulo A. Almeida, Telematica Instituut (The Netherlands)
- Peter F. Linington, University of Kent (UK)
- Akira Tanaka, Hitachi (Japan)
- Bryan Wood, Open-IT Ltd (UK)
- Web site: http://wodpec2006.telin.nl/
2006 Advances in Quality of Service Management Workshop (AQuSerM) at the EDOC 2006 Conference

October 17, 2006 at Montparnasse II of the Regal Kowloon Hotel in Hong Kong

WORKSHOP PROGRAM

9:00 Opening
- Introductory Remarks, Iman Poernomo and Guijun Wang
- Self Introduction of Participants

9:15 Session 1: Contract-based Management
- Scheduling Real-Time Components Using Jitter-Constrained Streams
  Claude-Joachim Hamann, Steffen Zschaler
- Quality of Service (QoS) Contract Specification, Establishment, and Monitoring for Service Level Management
  Changzhou Wang, Guijun Wang, Haiqin Wang, Alice Chen and Rodolf A Santiago
- Optimizing Web Service Composition Based on QoS Negotiation
  Wen-Li Dong

10:45 Coffee break

11:00 Session 2: Model-driven Management
- Using Model-Driven Engineering to generate QoS Monitors from a formal specification
  Sebastien Saudrais, Olivier Barais, Laurence Duchien
- Formal MDA for QoS instrumentation
  Kenneth Chan
- Web Service Testing Method Based on Fault-coverage
  Wen-Li Dong

12:30 Lunch

14:00 Session 3: Trust and Process
- Independent Channel Multi Method Multi-Factor Authentication (MMM-FA) model for B2P remote Commerce
  A.K.M. Harun-Ar-Rashid
- Secure Negotiation in Virtual Organizations
  Sakyibea Darko-Ampem, Maria Katsoufi, Pablo Giambiagi
- A Conceptual Model of ICT-Supported Unified Process of International Outsourcing of Software Production
  Anicet Yalaho

15:30 Coffee break

16:00 Session 4: Discussion and Future Directions

WORKSHOP CO-ORGANIZERS
- Iman Poernomo, King’s College London, UK
- Guijun Wang, The Boeing Company, USA

- Web site: http://palab.dcs.kcl.ac.uk/AQuSerM.htm
2006 Electronic Document Management in an Enterprise Environment Workshop
October 17, 2006 at Montparnasse III of the Regal Kowloon Hotel in Hong Kong

WORKSHOP PROGRAM
09:00 Welcome
  • Thomas Kwok and William Cheung
09:15 Session 1 – Invited paper
  • “Six Thousand Words about Multi-Perspective Personal Document Management” - Andreas R. Dengel
10:00 Session 2 – Regular paper
  • “Using Generic Services for Document Life Cycle Management” - Markus Aleksy and Michael Schwind
10:30 Coffee break
11:00 Session 3 – Regular papers
  • “Personalized Document Retrieval in Multi-party Environments with the Semantic Desktop” - Mark Siebert, Pierre Smits, Leo Sauermann and Andreas Dengel
  • “A Model for Digital Archival of Municipal Documents” - Pasi Tiitinen, Pasi Tyrvainen and Osmo Palonen
12:30 Lunch
14:00 Session 4 – Short papers
  • “Practical Design and Implementation of Web-based Document Management Systems” - Jason Yao and Jessica H. Li
  • “Making Sense of an Electronic Document – Visualization Strategies for Concept Presentation” - Naresh Kumar Agarwal and Danny C. C. Poo
  • “An Enterprise Electronic Contract Management System using Dual XML and Secure PDF Documents” - Thomas Kwok and Thao Nguyen
  • “Automated Trainable Summarizer for Financial Documentn” - Rima Sureka and Hinny P. H. Kong
15:20 Coffee break
15:40 Session 5 – Short papers
  • “DynaQ – Dynamic Queries for Electronic Document Management” - Stefan Agne, Christian Reuschling and Andreas Dengel
  • “Document Layout Analysis & Classification and its Application in OCR” - Gauray Gupta, Shobhit Niranjan, Ankit Shrivastava and RMK Sinha
17:00 Ending remarks
  • Thomas Kwok and William Cheung

WORKSHOP CO-ORGANIZERS
  • Dr. Thomas Kwok, IBM Research Division, USA
  • Dr. William Cheung, Hong Kong Baptist University, Hong Kong
WORKSHOP PROGRAM

09:00 Session 1
- Welcome by workshop co-organizers and introduction of all participants
- "Trust Assessment Using Provenance in Service Oriented Application" by Shrija Rajbhandari, Arnaud Contes, Omer F.Rana, Vikas Deora, and Ian Wootten
- "Using Blueprints for Engineering Electronic Market Services" by Dirk Neumann, Carsten Holtmann, and Christof Weinhardt

10:30 Coffee break

11:00 Session 2
- "Web-service Based Human Resource Recruitment by using Matchmaking Decision Support" by Gilbert H. L. Luk, Dickson K. W. Chiu, and Ho-fung Leung
- "A New Approach to Electronic Services using Game-Based Design" by Jarno Salonen, Petri Ruutikainen, and Aki Ahonen
- "Web Services Selection and Composition based on the Routing Algorithm" by Yifei Wang, Hongbing Wang, and Xun Xu
- Ending remarks by workshop co-organizers

WORKSHOP CO-ORGANIZERS
- Dr. Dickson K. W. Chiu, Dickson Computer Systems (email: dicksonchiu@ieee.org)
- Prof. Ho-fung Leung, Dept. of Computer Science and Engineering, The Chinese University of Hong Kong (email: lhf@cuhk.edu.hk)
Conference on 18-20 October 2006

Regular Paper Sessions

Regular Paper Session 1 - Enterprise Architecture
Session chair: Maarten Steen (Telematica Instituut, The Netherlands)

Extended Influence Diagrams for Enterprise Architecture Analysis
Pontus Johnson, Robert Lagerström, Per Närman, and Mårten Simonsson

Tool Support for Enterprise Architecture Management - Strengths and Weaknesses
Alexander M. Ernst, Josef Lankes, Christian Schweda, and André Wittenburg

Solution Architecting Mechanism
Tony Shan and Winnie Hua

Regular Paper Session 2 - Service Oriented Architecture
Session chair: Jian Yang (Macquarie University, Australia)

ViDRE - A Distributed Service-Oriented Business Rule Engine Based on RuleML
Christoph Nagl, Florian Rosenberg, and Schahram Dustdar

Service Interaction Modeling: Bridging Global and Local Views
Johannes Zaha, Marlon Dumas, Arthur ter Hofstede, Alistair Barros, and Gero Decker

Extended Collaboration Description Language (X-CODL)
Jia Zhang

Note: Due to personal reasons, the author can not come to make her presentation.

Regular Paper Session 3 - Web Services
Session chair: Vijaykumar Rachamadugu (MITRE, USA)

A Performance Evaluation of Web Service Security
Kezhe Tang, Shiping Chen, David Levy, John Zic, and Bo Yan

A Model Driven Development Framework for Enterprise Web Services
Xiaofeng Yu, Jun Hu, Yan Zhang, Tian Zhang, Xuandong Li, Linzhang Wang, and Jianhua Zhao

Bridging Multi-Agent Systems and Web Services
Omair Shafiq, Ying Ding, and Die Fensel

Regular Paper Session 4 - Business Process Model
Session chair: Virgilio Gilart Iglesias (University of Alicante, Spain)

Business Continuity Model Regeneration System for Manufacturing Components
Diego Marcos-Jorquera, Francisco Maciá Pérez, Virgilio Gilart-Iglesias, and José Vicente Berná-Martínez

Estimating Structures of Business Process Models from Execution Logs
Shiro Ogasawara, Kenichi Tayama, and Tetsuya Yamamura

Structural Patterns for Soundness of Business Process Models
Boudewijn van Dongen, Jan Mendling, and Wil van der Aalst
**Regular Paper Session 5 - Workflow Technologies**
Session chair: Matthias Book (University of Leipzig, Germany)

Combining Analysis of Unstructured Workflows with Transformation to Structured Workflows
Rainer Hauser, Michael Friess, Jochen Küster, and Jussi Vanhatalo

Towards Transactional Pervasive Workflows
Frederic Montagut and Refik Molva

Secure Dissemination of XML Content using Structure-Based Routing
Ashish Kundu and Elisa Bertino

**Regular Paper Session 6 - Systems Verification and Tolerant**
Session chair: Colin Atkinson (University of Mannheim, Germany)

A Fault-Tolerant Scheme for Complicated Transaction Patterns in J2EE
Lin Zuo, Shaohua Liu, and Jun Wei

Reducing Verification Effort in Component-Based Software Engineering through Built-In Testing
Daniel Brenner, Colin Atkinson, Barbara Paech, Rainer Malaka, Matthias Merdes, and Dima Suliman

Towards 2D Traceability for Contract Aware Visual Transformations with Tolerated Inconsistencies
Pieter Van Gorp, Frank Altheide, and Dirk Janssens

**Regular Paper Session 7 - Business Contracts**
Session chair: Rainer F. Hauser (IBM Zurich Research Lab, Switzerland)

From Trading to eCommunity Population: Responding to Social and Contractual Challenges
Lea Kutvonen, Janne Metso, and Sini Ruohomaa

Translating Business Contract into Compliant Business Processes
Zoran Milosevic, Shazia Sadiq, and Maria Orlowska

Compliance Checking between Business Processes and Business Contracts
Guido Governatori, Zoran Milosevic, and Shazia Sadiq

**Regular Paper Session 8 - Enterprise Services**
Session chair: Marten J. van Sinderen (University of Twente, The Netherlands)

An Event-Driven Workflow Engine for Service-Based Business Systems
Julian Jang, Alan Fekete, Paul Greenfield, and Surya Nepal

An Adaptive Negotiation Strategy for Electronic Transactions
Dhaval Patel and Arobinda Gupta

Semantic Enterprise Services Platform: Motivation, Potential, Functionality and Application Scenario
Dominik Kropka and Mathias Weske
Regular Paper Session 9 - Enterprise Management  
Session chair: Pontus Johnson (Royal Institute of Technology, Sweden)

Net-Centric Information Management  
Scott Renner

Specifying and Controlling Multi-Channel Web Interfaces for Enterprise Applications  
Matthias Book and Volker Gruhn

Project Management for Enterprise Integration  
Vamsi Salaka and Vittal Prabhu

Regular Paper Session 10 - Model Driven Architecture  
Session chair: Joao Paulo Almeida (Telematica Instituut, The Netherlands)

UML4SPM: An Executable Software Process Modeling Language Providing High-Level Abstractions  
Reda Bendraou, Marie-Pierre Gervais, and Xavier Blanc

A Model Driven Exception Management Framework for Developing Reliable Software Systems  
Susan Entwisle, Heinz Schmidt, Ian Peake, and Elizabeth Kendall

A Conceptual Framework for Service Modelling  
Dick Quartel, Maarten W.A. Steen, Stanislav Pokraev, and Marten van Sinderen

Towards Advanced Interaction Design Concepts  
Remco Dijkman, Teduh Dirgahayu, and Dick Quartel

Regular Paper Session 11 - Model Driven Development  
Session chair: Pieter Van Gorp (University of Antwerp, Belgium)

QoS-Aware Model Driven Architecture through the UML and CIM  
Kenneth Chan and Iman Poernomo

Requirements Traceability and Transformation Conformance in Model-Driven Development  
Joao Paulo Almeida, Pascal van Eck, and Maria-Eugenia Iacob

Significant Productivity Increasement through Model Driven Techniques: A Success Story  
J. Hossler, M. Born, and S. Saito

Model-Driven Dashboards for Business Performance Reporting  
Themis Palpanas, Pawan Chowdhary, Florian Pinel, Shyh-Kwei Chen, and Frederick Y. Wu
Short Paper Sessions

Short Paper Session 1 - Service Management and Architecture
Session chair: Julian Jang (CSIRO, Australia)

Formalizing Service Oriented Software Architecture Style and Analyzing
Junmei Sun, Huaikou Miao, and Xiaoxia Cao

Adapting Ubiquitous Enterprise Services with Context and Views
Dickson K.W. Chiu, Dan Hong, S.C. Cheung, and Eleanna Kafeza

Services and Networks Management through Embedded Devices and SOA
Virgilio Gilart-Iglesias, Francisco Maciá Pérez, Juan Antonio Gil-Martínez-Abarca, and Diego Marcos-Jorquera

Quantifying Contexts for User-Centered Web Service Discovery
Liu Hai, Qing Li, and Naijie Gu

Short Paper Session 2 - Model Driven Design
Session chair: Antonio Vallecillo (University of Malaga, Spain)

Ontology Driven Definition of a Portlet Functionality Model
Mª Ángeles Moraga, Coral Calero, and Mario Piattini

Ontology Modeling for Contract: Using OWL to Express Semantic Relations
Yalan Yan, Jinlong Zhang, and Mi Yan

Towards Model-driven Evolvability of Enterprise Information Systems
Theo Dirk Meijler, Douwe Postmus, and Hans Wortmann

Semi-Automatic Distribution Pattern Modeling of Web Service Compositions using Semantics
Ronan Barrett and Claus Pahl

Note: Due to the time conflict, this paper will be presented at the Regular Paper Session 2.

Short Paper Session 3 - Enterprise Applications
Session chair: Thomas Y Kwok (IBM T. J. Watson Research Center, USA)

A Fast and Efficient Route Finding Method for Car Navigation Systems with Neural Networks
Mehdi Hashemzadeh

Enterprise Computing Systems as Information Factories
K. Mani Chandy, Lu Tian, and Daniel Zimmerman

Why Process-Orientation is Scarce: An Empirical Study of Process-Oriented Information Systems
Mutschler Bela, Reichert Manfred, and Johannes Bumiller
Short Paper Session 4 - Web Services Interoperability and Composition
Session chair: Florian Rosenberg (Technical University of Vienna, Austria)

Testing BPEL-Based Web Service Composition Using High-level Petri Nets
Wenli Dong, Hang Yu, and Yu-Bing Zhang

Integrated Configuration of Enterprise Systems for Interoperability
Christian Janiesch, Alexander Dreiling, Ulrike Greiner, and Sonia Lippe

Business Collaboration Development: A Case Study in Capital Market
Aries Tao Tao, Jian Yang, and Hongyu Jia

Service-Flow: QoS Based Service Composition in CGSP
Haijun Cao, Hai Jin, and Song Wu, Li Qi

Short Paper Session 5 - Enterprise Security
Session chair: Tony Shan (Wachovia Bank, USA)

Information Security Guidance for Enterprise Transformation
Vijay Rachamadugu and John A. Anderson

Secured Enterprise Access with Strong SIM Authentication
Audun Wangensteen, Lars Lunde, Ivar Jørstad, and Thanh van Do

Composing Administrative Scope of Delegation Policies Based on Extended XACML
Xiao Feng Li and Feng Deng Guo

Anonymity and Security for Persistent Conversion
Changjie Wang, Dickson Chiu, and Ho-fung Leung

Short Paper Session 6 - Workflow Management
Session chair: Dickson K.W. Chiu (Dickson Computer Systems, Hong Kong)

An Evaluation Approach for Analyzing Workflow Management Systems from a Value-Based Perspective
Mutschler Bela, Reichert Manfred, and Johannes Bumiller

Policy-based Context-Aware Adaptable Software Components for Mobility Computing
Tomasz Szydlo, Robert Szymacha, and Krzysztof Zielinski

An Approach of Role Hierarchy Management for Workflow
Fang Yin, Yuqing Sun, Peng Pan, and Liang Feng

A Consistent Framework for Enterprise Information System Engineering
Mara Nikolaidou, Nancy Alexopoulou, Argyris Tsadimas, Alexandros Dais, and Dimosthenis Anagnostopoulos
Keynote Speeches

Keynote Speech 1

Paradigm Shift of Telecommunications Services and Management for NGN (Next Generation Networks)
Masayoshi Ejiri (Fujitsu Ltd, Japan)

In today’s highly competitive and converging market, Telecommunications Service Providers are faced with making dramatic changes if they are to meet the evolving needs of IP and Mobile in the new emerging eBusiness environment. Previously the industry was characterized by massive monolithic operators that supplied essential “infrastructure” type services that changed little over time. Today, the ability to create new and modify existing services in a timely and efficient manner, is becoming paramount if a Service Provider is going to be able to continue to compete and survive.

In this keynote session, new features required in Next Generation Networks to accommodate these changes are identified and the paradigm shift that it is necessary for telecommunications management to undergo is discussed. This new paradigm is based on a novel management architecture that encompasses enhanced business processes that enable the components supplied by a variety of ever changing business partners to be brought rapidly together to create competitive telecommunications services. The new architecture extends beyond the framework currently being adopted as the new TMN (Telecommunications Management Network) capable of supporting Next Generation Networks by supporting the ability to realize customer centric Service Level Agreements.

About the Speaker

Masayoshi Ejiri was responsible for directing the telecommunications management business strategy and Fujitsu groups after he joined them in 1995 as a Vice President of Fujitsu Ltd and the Chief Scientist of the Network Systems Group. He is currently working as a Director of the Photonic systems Group within Fujitsu Ltd.

Dr. Ejiri began his professional career in 1967 at NTT where he engaged in various business areas including transmission systems development, visual communication systems development and nation-wide digital transmission network planning and management. Whilst with NTT his positions included being director of the telephone office and being the Executive Manager responsible for strategic planning of service/network operations and management systems development. He was a major contributor to ITU-T TMN (Telecommunications Management Network) standardization from the onset of this work, where he represented NTT.

Dr. Ejiri has also been deeply involved in academic activities as a regular writer and speaker on the telecommunications management field and has submitted many papers to journals and conferences. He has also given many keynotes, panels and invited speeches at IEEE sponsored conferences, was IEEE ComSoc Enterprise Networking Technical Committee chair in 2000-2002 and has served as general co-chair, advisory board member, organizing committee member, principal guest editor, etc for a number of international symposia and conferences. He has also served as a Board member of the TMF (TeleManagement Forum).

In the Asia Pacific regions, he initiated the TM (Telecommunications Management) Committee in the IEICE of Japan in 1995 and he founded APNOMS (Asia-Pacific Network Operations and Management Symposium) in 1997. He has received B.Eng. and Ph.D. degrees from the University of Tokyo and is also an IEICE/Japan Fellow.
Keynote Speech 2

User-Centered Agents for Structured Information Location on the Web

Xindong Wu (University of Vermont, USA)

This talk presents the design of a digital library system that integrates conventional digital library services with contemporary WWW advantages, such as comprehensive coverage and agents for information search and selection. We use a user-centered approach and apply data mining techniques in the design of agents for information search and selection. There are various agents in this digital library system to perform different functions. Among them, SiteHelper is a unique agent in our system compared to existing digital library systems. It acts as a housekeeper for the system and as a helper for the users to find relevant information. In order to assist the users in finding relevant information at the centralized location (with Web links to the global Web), SiteHelper interactively and incrementally learns about each user's areas of interest and aids them accordingly, by deploying data mining techniques with incremental learning facilities as its learning and inference engines.

About the Speaker

Xindong Wu is a Professor and the Chair of the Department of Computer Science at the University of Vermont. He holds a PhD in Artificial Intelligence from the University of Edinburgh, Britain. His research interests include data mining, knowledge-based systems, and Web information exploration. He has published extensively in these areas in various journals and conferences, including IEEE TKDE, TPAMI, ACM TOIS, IJCAI, AAAI, ICML, KDD, ICDM, and WWW, as well as 12 books and conference proceedings.

Dr. Wu is the Editor-in-Chief of the IEEE Transactions on Knowledge and Data Engineering (by the IEEE Computer Society), the founder and current Steering Committee Chair of the IEEE International Conference on Data Mining (ICDM), an Honorary Editor-in-Chief of Knowledge and Information Systems (by Springer), and a Series Editor of the Springer Book Series on Advanced Information and Knowledge Processing (AI&KP). He was Program Committee Chair for ICDM ’03 (the 2003 IEEE International Conference on Data Mining) and is Program Committee Co-Chair for KDD-07 (the 13th ACM SIGKDD International Conference on Knowledge Discovery and Data Mining). He is the 2004 ACM SIGKDD Service Award winner, and a 2005 Chaired Professor in the Cheung Kong (or Yangtze River) Scholars Programme at the Hefei University of Technology sponsored by the Ministry of Education of China and the Li Ka Shing Foundation. He has been an invited/keynote speaker at numerous international conferences including ICNC'06/FSKD'06, IEEE ICTAI'04, IEEE/WIC/ACM WI'04/IAT'04, SEKE 2002, and PADD-97.
Reception, Social Program and Conference Banquet

Conference/workshop name badges and guest tickets are used for admission to lunches, the reception, and the banquet. Guest tickets for the activities below are of limited supply and can be bought at the registration desk on a first-come-first-serve basis. On the 20th October, the registration desk will be closed. We appreciate your early acquisition of guest tickets so that a better estimate of the number of participants of the above activities can be provided to the caterer in order to include more people to join these social activities.

18th October 2006 evening
Conference Reception

18th October 2006 evening (after reception)
Social Program: Hong Kong Tour

19th October 2006 evening
Conference Banquet
Lunch at Regal Kowloon Hotel

16 October: Chinese Lunch at Mamam Room (3/f)
17 October: Western Buffet Lunch at Mamam Room (3/f)

Lunch at Kowloon Shangri-La Hotel

18 October: Chinese Lunch at Harbour Room I, II, III (Mezzanine Level)
19 October: Western Lunch at Harbour Room I, II, III (Mezzanine Level)
20 October: Chinese Lunch at Harbour Room I, II, III (Mezzanine Level)

Reception at Kowloon Shangri-La Hotel

18 October: Reception at Harbour Room II, III (Mezzanine Level)

Night Tour of Hong Kong

18 October: Gather at Hotel Lobby at 7:50pm
Route: Victoria Peak, Hong Kong Convention Center, Golden Bauhinia Square, Avenue of Star

Banquet at House of Canton

19 October: Chinese Banquet at House of Canton (Festival Walk, LG2 Shop 40)

Gather at Hotel Lobby at 5:35pm and there is a bus transporting to the restaurant. There is also the return trip by the bus after the banquet at 10:00pm.

If you want to go to the restaurant by yourself, you can take either subway (MTR) or train (KCR) to the Kowloon Tong Station. The restaurant is located near the north end of the Festival Walk shopping mall. It is at the same level as the platform of KCR. If you are on a north-bound train, you could exit at around the 7th car of the train and go directly to Festival Walk, then turn right. If you are on a south-bound train, please follow the interconnection to MTR and use exit C2 of MTR to Festival Walk. The restaurant is two levels above. If you take MTR, just take exit C2.
The Vicinity

Conference, workshop hotels and nearby hotels (based on the tourist map in conference kit)
EDOC 2006 Organizing Committee

Honorary Co-Chairs:
Keith Chan (The Hong Kong Polytechnic University, Hong Kong)
Frances Yao (City University of Hong Kong, Hong Kong)

General Chair:
Patrick C. K. Hung (University of Ontario Inst. of Technology, Canada)

Program Committee Co-Chairs:
Qing Li (City University of Hong Kong, Hong Kong)
Don Sparrow (MITRE, USA)

Workshop Chair:
Antonio Vallecillo (University of Malaga, Spain)

Publicity Co-Chairs:
Barrett Bryant (University of Alabama-Birmingham, USA)
Kamalakar Karlapalem (International Inst. of Information Technology, India)

Local Organization Chair:
Hong Va Leong (The Hong Kong Polytechnic University, Hong Kong)

Finance Chair:
Howard Leung (City University of Hong Kong, Hong Kong)

Registration Chair:
Alvin Chan (The Hong Kong Polytechnic University, Hong Kong)

Industrial Liaison Officer:
Kenneth Lau (ICON Ltd, Hong Kong)

Steering Committee:
Colin Atkinson, Chair (University of Mannheim, Germany)
Keith Duddy (DSTC, Australia)
Zoran Milosevic (Deontik, Australia)
Guijun Wang (Boeing, USA)
Alain Wegmann (EPFL, Switzerland)
Barrett Bryant (University of Alabama-Birmingham, USA)
Marten J. van Sinderen (University of Twente, The Netherlands)
Maarten Steen (Telematica Instituut, The Netherlands)
Program Committee:

Jan-Oyvind Aagedal (SINTEF, Norway)
Witold Abramowicz (Poznan University of Economics, Poland)
Dave Akehurst (University of Kent, UK)
Markus Aleksy (University of Mannheim, Germany)
Anne Anderson (Sun Microsystems Laboratories, USA)
Mikio Aoyama (Nanzan University, Japan)
James Bailey (University of Melbourne, Australia)
Claudio Bartolini (HP Laboratories, USA)
Andrew Berry (Deontik, Australia)
Chris Bussler (Cisco Systems, USA)
Coral Calero (University of Castilla-La Mancha, Spain)
Shermann Chan (Waseda University, Japan)
Patrick Y.K. Chau (University of Hong Kong, Hong Kong)
Zhou Chen (Nanyang Technological University, Singapore)
Reynold Cheng (The Hong Kong Polytechnic University, Hong Kong)
S.C. Cheung (The Hong Kong Univ. of Science and Technology, Hong Kong)
William Cheung (Hong Kong Baptist University, Hong Kong)
Chia-Chu Chiang (University of Arkansas at Little Rock, USA)
Dickson K.W. Chiu (Dickson Computer Systems, Hong Kong)
Geoffrey Coulson (University of Lancaster, UK)
Fred Cummins (EDS, USA)
Farhad Daneshgar (University of New South Wales, Australia)
Oscar Diaz (University of Basque Country, Spain)
Gillian Dobbie (University of Auckland, New Zealand)
Masayoshi Ejiri (Fujitsu Ltd., Japan)
Damiani Ernesto (University of Milan, Italy)
Casey K. Fung (Boeing Phantom Works, USA)
Stephane Gagnon (NJIT, USA)
Gerald Gannod (Arizona State University, USA)
Tracy Gardner (IBM Hursley, UK)
Kurt Geihs (University of Kassel, Germany)
Claude Godart (Universite Henri Poincare, Nancy and INRIA, France)
Aniruddha Gokhale (Vanderbilt University, USA)
Jaime Gomez (University of Alicante, Spain)
Vivekanand Gopalkrishnan (NTU, Singapore)
Guido Governatori (The University of Queensland, Australia)
Jun Han (Swinburne University of Technology, Australia)
Jan Hendrik Hausmann (University of Paderborn, Germany)
Yigal Hoffner (IBM Zurich Research Lab, Switzerland)
Pontus Johnson (Royal Institute of Technology, Sweden)
Eleanna Kafeza (Athens University of Economics and Business, Greece)
Henry Kim (York University, Canada)
Axel Korthaus (University of Mannheim, Germany)
Ryszard Kowalczyk (Swinburne University of Technology, Australia)
Thomas Kuhne (Technische Universitat Darmstadt, Germany)
Lea Kuvonen (University of Helsinki, Finland)
Thomas Y. Kwok (IBM T. J. Watson Research Center, USA)
Marc Lankhorst (Telematica Instituut, The Netherlands)
Fion Lee (Hong Kong Baptist University, Hong Kong)
Ho-fung Leung (Chinese University of Hong Kong, Hong Kong)
Ying Li (IBM China Research Lab, China)
Yaping Lin (Hunan University, China)